RUDIMENTA
ANGLO-LATINUM
GRAMMATICÆ
LITERALIS & NUMERALIS.

In Usum Scholæ REGIÆ
Westmonasterienſis.

LONDINI,
Ex Officinâ *ELIZ. REDMAYNE.*
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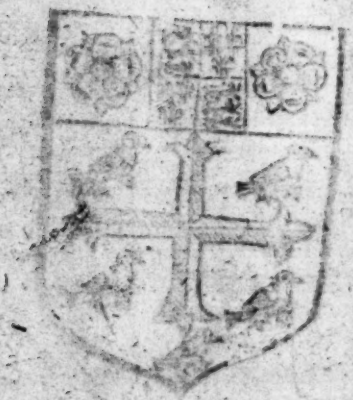


An English Introduction to the Latin Tongue.

GRAMMAR teacheth the right way of Speech.

There be four parts of Grammar.

The 1. Part teacheth LETTERS. 2. SYLLABLES. 3. WORDS. 4. SENTENCES.

LETTERS.

There be twenty four English Letters.

A. B. C. D. E. F. G. H. I. K. L. M. N. O. P. Q. R. S. T. V. W. X. Y. Z.

a. b. c. d. e. f. g. h. i. k. l. m. n. o. p. q. r. ſ. t. v. w. x. y. z.

These four *k. w. y. z.* are not Latin Letters; *h* is a note of *breathing*.

Great Letters are used in the beginning of Proper names, Emphatical Words, Sentences, and Verses.

Seven great Letters are used to express numbers.

I, one; V, five; X, ten; L, fifty; C, hundred; D, five hundred; M, thousand.

Two or more of these, I, X, C, M, accordingly encrease the number; II, two; XXX, thirty.

The smaller afore the greater leſſens it; IV, four; IX, nine; XL, forty; XC, ninety; CD, four hundred.

The Latins used also great Letters, the first of the word, for the Word, commonly a *Name*.

Single Letters for Eleven: *A. Aulus. C. Caius. D Decimus. K. Caeso*, or *Caesar. L. Lucius. M. Marcus. M'. Manius. N. Numerius. P. Publius. Q Quintus. T. Titus.*

Two Letters, for Six Names. *Ap. Appius. Cn. Cnêus. Op. Opiter. Sp. Spurius. St. Statius. Ti Tiberius.*

Three Letters for Four Names. MAM. *Mamercus.* SER. *Servius.* SEX. *Sextus.* TUL. *Tullus.*

Sometimes Letters were used for common words; as P. R. *Populus Romanus.* V. C. *Urbs Condita.*

The Latter Ages take a greater Licence in the use of Breviatures; as C. *Carolus. Ja. Jacobus. Hen. Henricus.* i. e. *id est.* e. g. *exempli gratiâ.* viz. *videlicet.* NB. *Nota bene.* And others at pleasure.

Letters are Vowels, or Consonants.

There are five Vowels; *a, e, i, o, u.*

Vowels joyned together make a Dipthong.

The Dipthongs are six *æ, œ, ai, au, ei, eu*; *ui* is an improper Dipthong.

The English abound, as in *zeal, friend, people.*

There are fourteen Consonants.

Eight Mutes, *i.e.* without sound; *b.c.d.f.g.p.q.t.*

These, except *f*, take *e* after them for sound; *be, ce, de*, &c.

q and sometimes *g* take *u* to help the sound. So. *s* in Latin sometimes takes *u*, but in English *w*; as quies, *quiet*; languor, *languish*; suavis, *sweet.*

Six halfe Vowels; *l, m, n, r, s, x*: These, and *f*, take *e* afore them; as *ef, el, em*, &c.

And of these, chiefly *l, r*, are called Liquids: *x* and also *z* are double Letters, *cs, ds.*

I, u, with a Vowel in the beginning of a Syllable become Consonants; as jocus *jest*; vitis *vine.*

C before *e, i, æ, œ*, is pronounced like *s*; as cella a *cell.*

G before *e, i*, like *gh*; as Gigas a *Giant.*

Ti before a vowel like *si*; as *actio*: unless *s* go before *t*; as *quæstio.*

A

A letter is called *pure* after a vowel; as in *reus*, *u* pure: *impure* after a Conſonant; as in *rus*, *u* impure.

Beſides Letters, there are other Notes or Markes.

This mark ['] Notes the want of a Letter; as 'tis, i'th'.

Two points [..] Over *i*, or *u*, ſeparate it from the immediate Vowel; as *ſuavis*.

SYLLABLES

A Syllable is the diſtinct part of a Word.

The Letters of a Syllable muſt not be disjoyned in the end of a line; as none of the Letters in ſtirps *ſtock*.

A Conſonant between two Vowels beginneth the Syllable; as *a-la*.

Two like Conſonants being together, the latter begins the Syllable; as *el-la*.

The ſame Conſonants, which begin the firſt, begin alſo the Middle Syllable; as *Spes*, *be-ſpes*.

The Letter that alone begins the Syllable, begins it alſo with another Conſonant added to it; as *pa-ter*, *patris*.

There belong to Syllables two ſpecial Notes.

1 Time or Meaſure. 2. Accent or Tune.

Time is Long [-] or Short [◡]

Accent is Acute or Treble ['] Circumflex or Mean [^] Grave or Baſe [`].

In Latine words of many Syllables, when the laſt but one is long, that muſt be pronounced loudeſt; otherwiſe the laſt but two.

All Syllables are to be eſteemed ſhort: but a Vowel afore two Conſonants, or one double; alſo any Dipthong makes the Syllable long: Authority, the reſt.

One long is equal to two ſhort.

Two long Syllables; or one long and two ſhort, make a foot, the meaſure of a Verſe; the firſt is called a Spondee; as conjux *husband*; the laſt a Dactyl, as auſicus *courtier*.

A Verſe conſiſts of Feet; otherwiſe called numbers.

In Latin ſix Feet make a long Verſe:

Whereof the fifth muſt be a Dactyl, the ſixth a Spondee; the four firſt indifferently either.

Five Feet make a ſhort Verſe.

Thus; Two Feet Dactyls or Spondees, and a long Syllable; then two Dactyls and a Syllable.

In Engliſh five Feet more uſually make a Verſe.

An Engliſh Verſe conſiſts of Numbers and Rythms; the Latin only of Numbers.

There are other marks or ſtops, that diſtinguiſh Clauſes or Sentences; here beſt to be ſhewed.

A Comma [,] a Colon [:] a Semicolon [;] a Period or point [.] a note of Interrogation [?] a note of Admiration [!] a Parentheſis ( ) a Paratheſis [ ] There is alſo a Copular note [-] as *Common-wealth*.

WORDS.

THere are Eight kinds of Words; commonly called Eight parts of Speech.

Article; Noun; Pronoun; Verb; Participle; Adverb; Præpoſition; Conjunction.

The Five former are Declinable; i.e. vary their end.

The three latter are Indeclinable, i. e. vary not; and may be called Particles, rather then parts of Speech.

Chiefly two words are declined; a Noun & a Verb.

Under a Noun may be conſidered the Article, Pronoun, and Participle.

Declinables are 1. *Regular*, that follow *Rule*: or *Irregular*; either ſuch as change ſome *letter* and may be called *Heteroſtich*; or that differ from ſome *rule* and are called *Heteroclite*.

2. *Contract*, that in the end draw two Syllables into one; or *Incontract*, that do not.

To

To all words belong two Generals.

1. *Kind*, or *Nature:* Primitive; as jus *right*: Derivative; as juſtus *righteous*.

2. *Make*, or *Frame:* Simple; as auris an *Ear*: Compound; as inauris an *Ear-ring*.

Here note; all words, from the Number of Syllables are called;

1. Monoſyllables, of one Syllable; as cor *heart*; ſuch are moſt of the Engliſh Idiom.

2. Diſſyllables, of two Syllables; as corpus *body*.

3. Polyſyllables, above two Syllables; as Satelles *Life-guard-man*; theſe in Engliſh are always compounds.

To a Noun properly belongs Gender; to a Verb, Tenſe, and Mood (whereof in due place); to both, Number, Caſe, Flexion; and alſo Perſon (of which in the rule of the Pronoun.)

Gender

Is a note of Sex.

There are four Genders.

The Maſculine relates to a Male; as Pater a *Father*.

The Fæminine relates to a Female; as Mater a *Mother*

The Common to both Sexes; as Homo a *Man* or *Woman*

The Neuter, to neither Sex; as Cœlum *Heaven*.

All things therefore without Sex, may ſeem to require words of the neuter gender: but it has pleaſed the Author of Language to render them under words of any Gender.

The Gender of Nouns, that imply no Sex, are to be known chiefly by the ending of the Words.

Number

Is Singular, or Plural.

The Singular notes one; as lapis a *ſtone*.

The Plural more than one; as lapides *ſtones*.

Where obſerve, the Engliſh Plural adds [*s*] to the Singular; ſometimes it adds [*n*] as *Oxe*, *Oxen*; ſometimes it changeth the Vowel; as *man*, *men*; *Foot*, *Feet*.

Caſe

Is the diverſe end of a word.

There be Six Caſes in both Numbers.

Nominative, Genitive, Dative, Accuſative, Vocative, Ablative.

All but the Nominative Singular are called oblique caſes.

The Nominative and Vocative generally; the Dative and Ablative Plural always are alike. The Nominative, Accuſative and Vocative of Neuters are the ſame in each Number, and in the Plural end in *a*.

Flexion

Of a Word, is called Declenſion; but of a Verb, properly Conjugation.

Declenſion is the varying of a Word through Numbers and Caſes.

THE ARTICLE

IS either Demonſtrative, that declares a Noun following; as Hic *The* or *This*.

Or elſe Relative, that refers to a Noun foregoing; as Qui *Who* or *which*.

	N.	G.	D.	Ac.	Ab.		N.	G.	D.	Ac.	Ab.
	Hic			*Hunc*	*Hoc*		*Hi*	*Horum*		*Hos*	
S.	*Hæc*	*Hujus*	*Huic*	*Hanc*	*Hac*	Pl.	*Hæ*	*Harum*	*His*	*Has*	*His*
	Hoc			*Hoc*	*Hoc*		*Hæc*	*Horum*		*Hæc*	

	N.	G	D.	Ac.	Ab.		N.	G.	D.	Ac.	Ab.
	Qui			*Quem*	*Quo*		*Qui*	*Quorum*		*Quos*	
S.	*Quæ*	*Cujus*	*Cui*	*Quam*	*Quâ*	Pl.	*Quæ*	*Quarum*	*Quibus,quis*	*Quas*	*Quibus,quis*
	Quod			*Quod*	*Quo*		*Quæ*	*Quorum*		*Quæ*	

Qui alſo is uſed for *Quo*.

The Article *Hic, hæc, hoc*, is uſed to expreſs the Genders of Nouns in Flexion.

A NOUN

IS the Name of a thing.

A Noun is either Substantive or Adjective.

A Noun Substantive can signifie alone; as aer *air*: an Adjective cannot; as lucidus *bright*.

A Noun also is either a Proper Name; as Londinum *London*: or Common; as Civitas a *City*.

The Substantive Common may have the Sign *a* or *the* afore it: No Adjective can, unless it have the Sign of the Substantive following; as a *Great City*.

The Declension of a Noun Substantive in English has these Signs answerable to the Latin Cases.

The Nominative, *a* or *the*; the Genitive *of* or *'s*; the Dative *to*, *for*; the Accusative like the Nominative, only differing in place; the Vocative *o*; the Ablative *with*, *by*; and others.

The Declensions of Latin Substantives

Are five; distinguisht chiefly by the Genitive Case.

The first Declension makes the Genitive in *æ*; the second in *i*; the third in *is*; the fourth in *ûs*; the fift in *eï*.

The First Declension

Contains Latin Nouns in *a*, of the Fæminine Gender; as *Via*.

	N.	G.	D.	Ac.	V.	Ab.
S.	*a*	*æ*,	*æ*,	*am*,	*a*,	*â*,
P.	*æ*	*arum*,	*is*,	*as*,	*æ*,	*is*.

Dea, *Filia*, and a few others make the Plural in *is* or *abus*.

The Second Declension

Contains Nouns in *us*, and *r*, Masculine; as *Dominus, liber*: in *um* Neuter; as *regnum*.

	N.	G.	D.	Ac.	V.	Ab.
S.	*us*,				*e*,	
		i,	*o*,	*um*,		*o*.
	um,				*um*,	
Pl.	*i*,			*os*,	*i*,	
		orum,	*is*,			*is*.
	a,			*a*,	*a*,	

E impure afore *r* is lost in the oblique cases; except the Vocative Singular: *e* pure remains through the cases; as *puer, pueri*; also *gener, socer, adulter*.

Proper names in *-ius* lose *-us* in the Vocative; as *Tull-ius,-i*, *Pompe-ius,-i*; so *fil-ius,-i*. *Deus* makes *ô deus*: and in the Plural *dii, diis*.

Nouns in *-us* that signifie a *City*, *Island*, *tree*, or *gemme* are of the Fæminine Gender.

The Third Declension

Contains nouns of ten Terminations; seven Consonants, *c, l, n, r, s, t, x*; three Vowels *e, o*, and also *a* Greek. *Lac, mel, ren, cor, pes, caput, arx, mare, sermo, poema*.

The Genders may be known by the ending of these nouns following: whereof the first four are Masculine, the next nine fæminine, the last nine Neuter.

Fines dant genus. ——

—(*M*) *Imb-er, hon-or, m-os, pugi-o*. (*F*) *me-ns, pa-x, L-aus, piet-as, seg-es, ir-is, lect-io, arun-do, sili-go*. (*N*) *ret-e, poe-ma, capu-t, me-l, la-c, jec-ur, om-en, on-us, f-ar*.

Noll

Moſt Nouns encreaſe; and end their oblique caſes, except the Vocative, as the Type ſhews.

	N.	G.	D.	Ac.	V.	Ab.
S.	...,	-i,	-i,	-em,	....,	-e,
Pl.	-es, -a,	-um,	-ibus,	-es, -a,	-es, -a,	-ibus.

The Various Terminations of the Genitive.

Additur *-is, -nis, -tis*; *s* fit *-tis, -dis*, ſimul *-is, -ris*: *Ver, ſermo, problema*; *quies, mens*, quoque *plebs, mos*.

1. Nouns in *e*, and many in *es* and *is* make the Genitive without encreaſe; as *mar-e, -is*; *nub-es, pan-is, -is*; *-ter* makes *-tris*; as *pa-ter, -tris*: ſo *im-ber, -bris*.

2. Nouns in *c, l, n, r*, ſimply take *is*; as *halec, ſol, ren, jubar, -is*; but *-men, -cen*, make *-minis, -cinis*, as *lumen, fidicen*: alſo *glut-en, pect-en, poll-en, -inis*: add theſe *eb-ur, fem-ur, reb-ur, -oris*.

3. Nouns in *-o* take *-nis*; as *ſermo, -nis*: in *-ma, -tis*; as *problema, -tis*.

Nouns in *-s* chiefly vary their end.

1. *S* impure into *-tis*; as *men-s, -tis*; in a few, *-dis*; as *glan-s, -dis*: Alſo Fæminines in *-as*; as *pieta-s, -tis*; ſome in *-es, -is, -us*; as *quie-s, -tis*; *here-s, -dis*; *li-s, -tis*; *lapi-s, -dis*; *ſalu-s, -tis*; *incu-s, -dis*.

2. *S.* after *b, p*; and *c, g* (latent in *x*) is made *-is*; as *trab-s, -is*; *du-x, -cis*; *re-x, -gis*.

3. Neuters in *-us*, turn *-s* into *-ris*; as *ju-s, -ris*.

The Vowel afore *s* is often changed; *e* into *i*, as *mil-es, -itis*; *prin-ceps, -cipis*; *vert-ex, -icis*. *u* into *o* or *e*; as *corp-us, -oris*; *gen-us, -eris*.

The

The various Termination of some other oblique cases.

Names of Rivers in *-is* not encreasing, make the Accusative in *-im*, the Ablative in *-i*; as *Tamesis*. Also some others; as *sitis*.

Neuters in *-e*, *-al*, *-ar*, make *-i* in the Ablative; and in the Plural *-ia*, *-ium*.

Likewise nouns in *-es*, or *-is* not encreasing, and *s* or *x* impure, make *-ium*.

The various Terminations of the oblique cases are more fully taught in Verse.

To the Third properly are refer'd the two other call'd the fourth and fifth Declensions; which seem to differ from the third only by contracting *i*, or *e* pure into the preceding Vowel: as it were *uïs*, *-ûs*; *ue -û*.

The Fourth Declension

Or First of the Contracts

Contains Nouns in *us*, purely declined, of the Masculine Gender; as *casus*: in *u* of the Neuter; as *cornu*.

	N.	G.	D.	Ac.	V.	Ab.
S.	*us*,	*ûs*,	*ui*,	*um*,	*us*,	*u*.
Pl.	*us*,	*uum*,	*ibus*,	*us*,	*us*,	*ibus*.

Nouns in *-u* commonly vary not their Vowel in the Sing. but the Poets make the Gen. in *-ûs*.

N. *u*. G. *ûs &c*. Pl. N. *ua*. G. *uum*. D. *ibus &c*.

Nouns in *-us* of this Declension are usually verbals, made of the Supine: or Nominals in *-atus*.

Add these also, *aem*, *astm*, *arcus*, *artus*; *cœstus*, *cœtus*; *fœtus*, *ficus*; *gradus*, *gustus*; *halitus*; *idus*; *impetus*, *incestus*; *lacus*; *metus*; *nurus*; *penus*, *porticus*, *portus*, *potus*; *ritus*, *ructus*; *sexus*, *sinus*, *socrus*, *specus*, *spiritus*; *tribus*; and *vultus*.

Most words of this Declension are deficient, either in case or number.

The

The Fifth Declenſion
Or Second of the Contracts

Contains Nouns in *es* of the Fæminine Gender; as *res*.

	N.	G.	D.	Ac.	V.	Ab.
S.	*es*,	*ei*,	*ei*,	*em*,	*es*,	*e*.
Pl.	*es*,	*erum*,	*ebus*,	*es*,	*es*,	*ebus*,

The reſt except *dies*, (that varies the Gender) want the Plural; a few only have three caſes. N. A. V. as *acies*, *facies*.

Nouns of this Declenſion generally end in *-ies*; except *fides*, *res*, *ſpes*.

The Greek Nouns.

Chiefly Proper Names, keep their own beſides the Latin terminations throughout the four former Declenſions.

In the Firſt.

Nouns in *as* or *es* are Maſculine; in *e*, Fœminine: The Plural, if there be any, 'tis regular.

	N.	G.	D.	Ac.	V.	Ab.
S.	*as*,	*æ*,	*æ*,	*an*,	*a*.	*a*.
	es,			*en*,	*e* or *a*,	*e* or *a*.
	e,	*es*,	*e*,	*en*,	*e*,	*e*.
Pl.	*æ*,	*arum*,	*is*,	*as*,	*æ*,	*is*.

In

In the Second.

Proper Names in *-eus*, or *-ôs* are Maſculine; in *-on*, Neuter; *-ôs* keeps the Vowel; *-on* varies it like *-um*.

	N.	G.	D.	Ac.	V.	Ab.
Orpheus	*eus*,	*eos*, or *ei*	*eo*,	*ea*, or *eum*,	*eu*,	*eo*.
Androgeos S.	*ôs*,	*ô*,	*ô*,	*ôn*,	*ô*,	*ô*,
Ilion	*on*,	*i*,	*o*,	*on*,	*on*,	*o*,

In the Thitd.

Nouns in *an*, *en*, *in*, *on*, *es*, *ûs* are Maſculine: in *as*, *is*, moſt Fœminine: as *Titan*, *Hymen*, *Delphin*, *Solon*, *Chremes*, *Peſſimûs*; *Pallas-antis*, *Paris* Maſc. *Pallas-ados*, *Phillis* Fœm.

	N.	G.	D.	Ac.	V.	Ab.
S.	....	*is* or *os*,	*i*,	*em* or *a*.	....,	*e*.
Pl.	*es*,	*um*.	*ibus*.	*as*.	*es*.	*ibus*.

In the Fourth.

Proper names in *o* are Fœminine, as *Sappho*. Theſe make the Genitive in *ûs*, as Nouns of the Fourth; but keep their Vowel *o* in all other Caſes.

	N.	G.	D.	Ac.	V.	Ab.
S.	*o*,	*ûs*,	*ô*,	*ô*,	*o*,	*ô*,

Note the Greek Vocative through the Declenſions loſes *s*; except Nouns of the third in *as*; as Voc. *Æneas*, *Therſite -a*, *Orpheu*, *Philli*; But, *ô Pallas*. The

The Declenſions of Latin Adjectives

Are three: The firſt not encreaſing obſerves the firſt and ſecond form of Subſtantives, without the Article; the two latter obſerve the third of Subſtantives with the Article.

The Firſt Declenſion

Is of Adjectives with three terminations; the firſt Maſculine in *-us*, or *-r*; the ſecond Fæminine in *-a*; the third Neuter in *-um*; as *bonus, niger.*

Adjectives in *-us* loſe *s*, thoſe in *-er* loſe *e* in the oblique caſes; except *æger, prosper, liber, miser, tener, alter.*

		N.	G.	D.	Ac.	V.	Ab.		N.	G.	D	Ac.	V.	Ab.
S.	M.	*us*, or *r*,	*i*,	*o*,	*um*,	*e*, or *r*	*o*,	PL.	*i*,	*orum*,		*os*,	*i*,	
	F.	*a*,	*æ*,	*æ*,	*am*,	*a*,	*a*,		*æ*,	*arum*,	*is*,	*as*,	*æ*,	*is*,
	N.	*um*,	*i*,	*o*,	*um*,	*um*,	*o*,		*a*,	*orum*,		*a*,	*a*,	

Some Adjectives in *-us*, make the ſingular Genitive in *-ius*, the Dative in *-i*: *Solus, totus, ullus, nullus, uter, neuter, alter, -ius*; and *alius*, which makes the Neuter *aliud*, and the Genitive *alius* for *aliius*.

S. N. *Solus, -a, -um.* G. *-ius.* D. *soli*, &c. as above.

Quis the Noun is declined rather like the Article *qui*, then by this form.

S. N. *Quis, que, quod.* Gen. *Cujus.* &c.

The Neuter *Quid* is a Subſtantive; us'd in the Nominative and Accuſative Singular.

Quis the latter part of a Compound, makes the Fœminine Singular, and Neuter Plural in *-a* for *a*.

The Compound *Quidam* changes *m* into *n* afore *d*; as *quendam, quorundam.*

Theſe Compounds, *quidam, quisque, quilibet, quivis*, are nouns and not *relatives*; and therefore ſeem rather made of *quis*, then *qui*.

The

The Second Declenſion

Is of Adjectives with two terminations; the firſt in *is*, Maſculine or Feminine; the ſecond in *e*, Neuter; as *trifſis*.

	N.	G.	D.	Ac.	V.	Ab.		N.	G.	D.	Ac.	V.	Ab.
S.	*is*,	*is*,	*i*,	*em*, *im*,	*is*,	*i*.	Pl.	*es*,	*ium*,	*ibus*,	*es*,	*es*,	*ibus*.
	e,			*e*,	*e*,			*ia*,			*ia*,	*ia*,	

Some few make the Maſculine in *er* or *ir*; as *acer* or *acris*.

The Third Declenſion

Is of Adjectives with one termination of three Genders: in *x* or *s* impure; and in *as* or *es*; as *felix*, *prudens*, *Ravennas*, *dives*.

The Plural is the ſame as of the ſecond Declenſion.

	N.	G.	D.	Ac.	V.	Ab.		N.	G.	D.	Ac.	V.	Ab.
S.		*is*,	*i*,	*em*,		*e* or *i*	Pl.	*es*,	*ium*,	*ibus*,	*es*,	*es*,	*ibus*.
								ia,			*ia*,	*ia*,	

There are ſome in *-r* of this form; as *par*, *pauper*, *memor*, &c. alſo *vetus*, *vigil*.

Some make the Ablative only in *e*, and the Genitive Plural in *-um*; as *pauper*: *memor* only in *-i*, *-um*.

Compounds keep the flexion of the Subſtantive component; as *tricuſpis*, *-pide*, *-pidum*.

Com-

Compariſon of Adjectives.

There are three degrees of Compariſon: the firſt called the *Poſitive* is the very word; the other *Comparative* and *Superlative* extend the ſenſe of the word.

The Comparative adds to the word, the ſign *more* magis; the Superlative, the ſign *moſt* maximè. Theſe two degrees put to the Engliſh word as it were the laſt Letters of the ſigns; as hard, *-er*, *-eſt*.

The Latin Degrees add to the caſe of the Poſitive in *-i*, the endings, *-or*, *-ſſimus*; as *dur-us*, G. *-i*, *-ior*, *-iſſimus*; *feli-x*, G. *-cis*, D. *-ci*, *-cior*, *-ciſſimus*.

Adjectives in *-er*, take *-rimus*; as *niger*, *nigri-or*, *niger-rimus*. A few in *-ilis* make *-illimus*; as *facilis*, *humilis*, *ſimilis*, *-ili*, *-ilior*, *-illimus*.

Adjectives in *us* pure, uſe only the ſigns; as pius *pious*, magis pius *more pious*, maximè pius *moſt pious*.

Some Adjectives borrow their degrees from other abſolute words; or form them irregularly: as

Bonus *good*; melior *better*; optimus *beſt*.

Malus *bad*; pejor *worſe*; peſſimus *worſt*.

Parvus *little*; minor *leſs*; minimus *leaſt*.

Magnus *great*; major *greater*; maximus *greateſt*.

Some indeclinable words are compared:

The Particles in *-ra* make nouns in *-erior*, *-imus*; as inf-ra, *-erior*, *-imus*.

Ext-ra, *-erior*, *-imus* & extremus.

Sup-ra, *-erior*, ſupremus & ſummus.

The Declenſion of the Comparative in *-or*.

	N.	G.	D.	Ac.	V.	Ab.		N.	G.	D.	A.V.	Ab.
S.	*or*, *us*,	*oris*,	*ori*,	*orem*, *em*,	*or*, *us*,	*ore*, *ori*.	Pl.	*ores*, *ora*,	*orum*,	*oribus*,	*ores*, *ora*,	*oribus*.

Irregular

Irregular Nouns.

1. Heteroſtoich.

Chiefly Derivatives or Compounds; as quinque, quintus; *five, fifth*: decem, undecim; *ten, eleven.* &c.

2. Heteroclites

Are of three ſorts, 1. Redundant. 2. Deficient. 3. Variant.

1. Redundant

In the Nominative; as *juvent-a, -tus.*

In the oblique Caſes; as *jecur.* G. *jecoris & jecinoris.*

Some nouns in *-us* ſignifying *trees*, double ſome caſes; eſpecially among the Poets; as *Laurus, -i*; ſometimes, *-us*: *quercus, -us*; ſometimes, *-i.*

Many Neuter Plurals, chiefly names of *feaſts* in *-lia*, make the Genitive in *-lium* and *-liorum*, as *Saturnalia*, G. *-lium*, and *-liorum*: ſo *ancile*, Pl. *-lia, -lium, -liorum.*

Neuters in *-ma* make the Plural Dative and Ablative, *-matis* and *-matibus*, as *Poema.*

Domus varies the caſes after this manner;

	N.	G.	D.	Ac.	V.	Ab.
S.	*Domus,*	*-i, & ûs,*	*ui,*	*um,*	*us,*	*o.*
Pl.	*us.*	*orum & uum,*	*ibus,*	*os & us,*	*us,*	*ibus.*

Greek Nouns, beſides the *Latin* forms, have their *own* alſo; eſpecially among the Poets; as *Chrem-es.* G. *-etis & -is. Dido.* G. *-ûs & -onis. Achilles* & *Ulyſſes* commonly make *-is* the Latin Genitive; but in poetrie, alſo *-ei & i* from the Greek *-eus.*

2. Defi-

2. Deficient.

1. In Case.

Aptotes: Nouns used in all Cases, with the same ending; as *nequam, pondo.*

Monoptots: Nouns of one case; as Ac. *inficias.*

Diptots: Nouns of two Cases; as N. Ac. *quid, nihil.*

Triptots: Nouns of three cases; as N. Ac. V. *fas.*

Tetraptots: Nouns of four Cases Singular:

Some Fæminines have only the G D. Ac Ab. as *opū, precū, pecudū* &c. Neuters in -u have N. Ac. V. Ab. *Gelu* wants also the Plural number.

Pentaptots: Nouns that want the Vocative case; such as are called Indefinite; as *aliquis.* Interrogative; as *quis?* Distributive; as *omnis.* Negative; as *nemo.*

2. In Number.

Singular Nouns.

A Proper name, the character of a Person or thing; as *Romulus, Roma.*

Fæminines of many Syllables in *-as*, or *ia*; as *paupertas, opulentia.* Nouns of Metal in -um; as *aurum.* Of age in *a, m, um*; as *senecta, -m, senium.* Most fruits of the Earth; as *triticum*; *allium, ruta*; *piper.* Also liquors; as *oleum, lac.*

Plural Nouns.

Names of *feasts*; as *Bacchanalia.* Many of *Cities*; as *Athenæ.*

The English Heteroclites.

1. Redundant; chiefly Compounds; as *manhood, manfulness: valiant, valorous.* 2 Deficient: 1. *In Case*; All English Nouns are Aptots. The Adjective is the same through both Numbers; as S & Pl. *good, bad*: So the Article *which, what*: And some Substantives; as *sheep.* No Substantive varies its cases from the Nominative; Sing. or Plur. as S. N. a *man.* G. of a *Man &c.* Pl. N. *Men.* G. of *men. &c.* So the Article, *This, these.* 2. *In Number*; much as the Latin afore; *viz.* Singulars: *Gildas, Chaucer*; *Gold*; *wheat*; *milk*; *peace.* Plurals. *Athens, Wells*; *riches*; *bowels*; *many.*

Two Catalogues of Particular Nouns:

1. That want the Plural: 2. The Singular Number. To both are added such cases, as are found.

Singulars.

Ævum, -is.	Fimus.	Limus.	Penus.	Situs.
Aer.	Fœnum.	Lues.	Penum.	Soboles, -es
Æs, -ra.	Forum, -a.	Lutum.	Pituita.	Solium.
Æther.	Fuga, -as.	Lux, es, ibus.	Pix, -ces.	Solum.
Alvus, -os.	Gloria, -as.	Mare, -ia.	Plebs.	Tabes.
Barathrum.	Gluten.	Mel, -la.	Pontus.	Talio.
Bilis, -es.	Hesperus.	Meridies.	Proles.	Tellus.
Callum.	Hilum.	Metus, -us.	Prosapia.	Thus, -ra.
Cholera.	Hordeum, -a.	Murmur, -a.	Pubes.	Tussis.
Cœnum.	Humus.	Muscus.	Pus.	Valetudo.
Cutis.	Hyems, -es.	Mustum, -a.	Quies.	Ver.
Electrum, -a.	Indoles.	Nihilum.	Rus, -ra.	Vinum.
Ebur.	Jubar.	Nitrum.	Salum.	Virus.
Fama, -as.	Jus, -ra.	Pallor.	Salus.	Viscum.
Fames.	Justitium.	Pax.	Sanguis.	Vitrum.
Far, -ra.	Labes, -es.	Pelagus.	Sitis.	Vulgus.
Fel.	Lethum.			

Plurals.

Acta.	Compita.	Ilia.	Munia.	Quisquiliæ.
Adversaria.	Crepundia.	* Indigetes, em.	Nouæ.	Reliquiæ.
Ambages, -e.	Cunabula.	Induciæ.	Nugæ.	Rostra.
* Antes.	Cunæ.	Insidiæ.	Nuptiæ.	Scapulæ.
Antiæ.	Cupediæ.	Inferiæ.	* Optimates, em	Scopæ.
Apinæ.	Divitiæ.	Lactes.	Palpebræ.	Scruta.
Argutiæ.	Excubiæ.	* Lemures.	Palearia, -ar.	Tenebræ.
Arma.	Exequiæ.	Liberi.	* Penates.	Tesqua.
Artus.	Exta.	Licia.	Phaleræ.	[illegible]
Blandiriæ.	Exuviæ.	Lustra.	Plagæ.	[illegible]
Bellaria.	Facetiæ.	* Manes.	Plures, [illegible]	[illegible]
Calendæ.	Fori.	Manubiæ.	Præcordia.	* [illegible]
Cancelli.	Fasti.	Magalia.	Præstigiæ.	Valvæ.
* Casses, -e.	Fauces, -e.	Mapalia.	Primitiæ.	Vergiliæ.
Castra.	Feriæ.	Mariscæ.	* Primores, em	Vindiciæ.
Clitellæ.	Gerræ.	Minæ.	* Proceres, em.	* Utres, -e.
Compedes, -e.	Idus.	Mœnia.	*This* [*] *notes Masculines.*	

Some words may be of both Catalogues, Singulars and Plurals for their different significations; as ædes, -is a *Temple*; ædes, -ium a *House*: fortuna *chance*, facultas *ability*, opis *help*; fortunæ, facultates, opes *riches*: mos *a custom*, mores *manners*: rostrum *a bill*, rostra *a pulpit*, &c.

3. Variant,

3. Variant.

1. Gender; having one gender in the Singular, and another in the Plural Number; as *Nundinum, -a; epulum, -a; delicium, -a; balneum, -a*; the Poets have *balnea.*

Carbasus, -a; jocus, locus, sibilus, frænum; i. & a.

2. Flexion; as *iter, itineris; nix, nivis; nox, noctis; senex, senis; Jupiter, Jovis; bos, bovis.* Pl. *boves, boum, bobus. vis.* pl. *vires.*

N. *vesper.* D. *i*, & *o*, Ac. *um*, Ab. *e*, & *o.*

Numeral Nouns

Have their peculiar forms in all Languages.

A Numeral Noun is a word of Number; either Cardinal, or Ordinal.

1. A Cardinal (or Primitive) signifies one or more units; as unus *one*; duo *two*; ambo *both*; tres *three.*

	N.	G.	D.	Ac.	V.	Ab.
S.	*Unus,*			*um,*	*e,*	*o.*
	a,	*ius,*	*i,*	*am,*	*a,*	*â.*
	um,			*um,*	*um,*	*o.*

This Adjective is not read in the Plural number, but with a noun Substantive that wants the Singular; as *unæ nuptiæ.* Ter. Andr.

	N.	G.	D.	Ac.	V.	Ab.
Pl.	*Duo,*	*orum,*	*obus,*	*os,*	*o,*	*obus.*
	æ,	*arum,*	*abus,*	*as,*	*æ,*	*abus.*
	o,	*orum,*	*obus,*	*o,*	*o,*	*obus.*

So is *Ambo* declined.

	N.	G.	D.	Ac.	V.	Ab.
Pl.	*Tres,* *Tria,*	*Trium,*	*Tribus,*	*Tres,* *Tria,*	*Tres,* *Tria,*	*Tribus.*

The Cardinals from three to a hundred are Plural Aptots.

Quatuor 4. quinque 5. sex 6. septem 7. octo 8. novem 9. decem 10. undecim 11. duodecim 12. tredecim 13. quatuordecim 14. quindecim 15. sedecim 16. septendecim 17. octodecim 18. undeviginti 19. viginti 20. triginta 30. quadraginta 40. quinquaginta 50. sexaginta 60. septuaginta 70. octoginta 80. nonaginta 90. centum 100.

From a Hundred to a Thousand the Numerals intervenient are regular Plurals.

Ducenti, -æ, -a 200. trecenti 300. quadringenti 400. quingenti 500. sexcenti 600. septingenti 700. octingenti 800. nongenti 900. Mille 1000.

The Adjective (*Mille*) is a Plural Aptot; the Substantive in the Singular number is a Tetraptot. N. *A. V. Mille.* Ab. *Mille.* In the Plural it is regular. N. *Millia*, G. *ium*, D. *ibus.* &c.

A Noun Ordinal (or Derivative) signifies only an *unite* in *order* or *place*; as primus *first*, decimus *tenth*, i.e. *one* in the *first* or *tenth place. viz.* decimum caput *the tenth Chapter.*

The Ordinals are regular Adjectives declined as *bonus.*

I V. C. M. are the first Letters of the Numeral Nouns.

I the Greek note from Ἰῶτα.

V the first vowel or sound in Quinque *five.*

C for Centum a *Hundred.*

M for Mille a *Thousand.*

X made of two V's joyn'd at their points or angles *ten.*

The ancient figures for C. M. were Ⅽ. Ⅿ.

The two halfes whereof, L *fifty*, D *five hundred*, are still in use.

N B. The old Ⅽ is now crooked C.

The old Ⅿ is streighined M.

A PRONOUN

Is a Noun implying a *Perſon*; and not admitting the ſign *a* or *the* afore it.

There are fourteen Pronouns: *Ego*, *tu*, *ſui*; *ipſe*, *ille*, *iſte*, *is*; *meus*, *tuus*, *ſuus*, *noſter*, *veſter*; *noſtras*, *veſtras*.

Four Pronouns only *tu*, *meus*, *noſter*, *noſtras* have the Vocative caſe.

Three Perſons: Firſt perſon, Ego *I*; Nos, *we*: Second perſon, Tu *thou*; Vos *ye*: and their derivatives; *meus*, *noſter*, *noſtras*; *tuus*, *veſter*, *veſtras*.

Third perſon, Sui *himſelf*, ſuus *his own*; ille, iſte, is *he*; And alſo all Nouns.

Ipſe *ſelf*, is appliable to all three Perſons.

Pronouns in all Languages are peculiarly declined.

Theſe three *Ego*, *Tu*, *Sui* are Subſtantives of one form.

Singulariter.						Pluraliter.					
N.	G.	D.	Ac.	V.	Ab.	N.	G.	D.	Ac.	V.	Ab.
Ego,	*mei,*	*mihi,*	*me,*		*me.*	*nos,*	*noſtrum-tri,*	*nobis,*	*nos,*		*nobis.*
Tu,	*tui,*	*tibi,*	*te,*	*tu,*	*te.*	*vos;*	*veſtrum-tri,*	*vobis,*	*vos;*	*vos;*	*vobis*
Sui,	*ſibi,*	*ſe,*	*ſe.*			*ſui,* &c. as the Singular.					

The *reſt* are *Adjectives* of three Formes or Declenſions.

The firſt Declenſion

Contains the *Primitives*, *ille*, *iſte*, *is*, *ipſe*: The three former make the neuter in *-d*; All, the G. in *-ius*; D. in *-i*.

	N.	G.	D.	Ac.	Ab.		N.	G.	D.	Ac.	Ab.
	Is			*eum*	*eo*		*ii*	*eorum*		*eos*	
S.	*ea*	*ejus*	*ei*	*eam*	*ea*	Pl.	*ea*	*earum*	*iis*, *eis*	*eas*	*iis*, *eis*.
	id			*id*	*eo*		*ea*	*eorum*		*ea*	

The Second Declenſion

Contains the Poſſeſſives *meus*, *tuus*, *ſuus*, *noſter*, *veſter* declined as *bonus*, *niger*: *meus* makes *mi* for *mee*.

The Third Declenſion

Contains the Nationals *noſtras*, *veſtras*, as *Ravennas*.

Certain Pronouns are compounded with an Emphatic Syllable; as *Egomet*, *tute*, *meipſe*, *idem*: or with a word; as *iſtiſe*.

Idem loſes *t*, and *d*, afore *-dem*; and alſo changes *m* afore it into *n*; as *idem*, *eadem*, *idem*; Ac. *eundem*, &c. Pl. G. *eorundem*, &c. like *quidam*.

Iſte is a Triptot. N. *iſte*, *-a*, *-d*. G. *-ius*. D. *-i*. Ac. *iſtum*, *-am*, *-d*. Ab. *iſto*, *-a*, *-o*. Pl. N. Ac. *iſta*. So *ille*.

The Declenſion of the three Engliſh Perſons.

	Singular				Plural		
N	*I*	*thou*	*he*	*ſhe*	*we*	*ye*	*they*
G	*of me*	*thee*	*of him*, *or his*	*of her*, *or her's*	*us*	*you*	*of them*, *or their's*
D	*to me*	*thee*	*him*	*her*	*us*	*you*	*them*

The ſame in the Ac. without the ſigns; and in the Ab. with its own ſigns. the V. like N. *Thou*; *ye*.

The Form of the Article (not much unlike) is therefore plac'd here.

S. and Pl. N. *who*. G. *of whom* or *whoſe*. D. *to whom* &c.

The Pronoun Aptot *That* Pl. *Thoſe*. *ſelf* Pl. *ſelves*.

You, *yours*, *of yours*, if they belong to one, are to be Latined by *tu*, *tuus*; if to more, by *vos*, *veſter*. *Him*, *her*, *his*, *them*, *their*, when they admit *ſelf* after them are to be Latined by *ſui*; when *own*, by *ſuus*. *Here*, *there*, *where*, with the particles *of*, *to*, *by*, *with*, *in*, *on*, *unto*, *at*, *about* &c. after them, are uſed for *this*, *that*, *it*, *which*.

My, *thy*, *our*, *your*, afore *ſelf*, *ſelves* are Latin'd by their Primitives; as *my ſelf* me ipſum. but *my*, *thy*, *him*, *her*, *our*, *your*, *their* coming between their Primitives and *ſelf*, *ſelves* are omitted in Latin; ſo is *own* with any of them; as *I my ſelf*, or *I my own ſelf* Ego ipſe; *he himſelf*, or *he his own ſelf*, ille ipſe; *they themſelves*, or *they their own ſelves* illi ipſi.

A VERB

IS a Word that joyns the ſenſe of the reſt together.

The chief Character of a *Latin* Verb, is either *Signification*: 1. *Being*; 2. *Motion*, i.e. *Action* or *Paſſion*, with *Being*: or *Termination* i.e. the laſt letter [*m*] [*o*] [*r*]

A Verb is therefore three-fold.

1. In [*m*]; the Verb SUM; which ſignifies to *Be*: and comes between Nouns, to make them *be* together: It is therefore called the Verb Subſtantive.

All others are reſolved into it and a Noun; as *lego*, i.e. *ſum legens*, and are therefore called verbs Adjective.

2. In [*o*]; Active, known by the ſign *do*, and is **Tranſitive*, as lego *I do read*: or *Intranſitive*, as curro *I do run*. * *Tranſitive* i.e. Active outwardly, or upon ſomething without.

3. In [*or*]; Paſſive, known by the ſign *am*; as legor *I am read*.

There is alſo a Verb *Common*, partly Active partly Paſſive: and it is either a Neuter in [*o*], ſignifying paſſively, as ægroto *I am ſick*: or a Deponent in [*or*] ſignifying actively, as ſequor *I do follow*.

Of this laſt kind, a few are found to ſignifie paſſively; as dignor *I do make*, or *I am made worthy*.

The Verb *Tranſitive* takes *r*. to make a *Paſſive*: The reſt, cannot take *r*.

Beſides *Being* or *Motion* (the principal Character of a Verb), there are alſo affections or appertinences: 1. Common; Perſon and Number. 2. Peculiar; Tenſe, Mood, and Conjugation.

The whole form of a Verb is termed the Voice; Active, or Paſſive.

The three Perſons end differently in both Numbers.

A Tenſe

Notes the time of Motion.

A Verb hath *ſix* Tenſes, to expreſs the threefold time; 1. The Preſent Tenſe (called likewiſe the Theme) notes the time *now*. 2. Three Preters, note the time ſome way *paſt*; Imperf. *not quite*, Perf. *quite*, Pl. p. *afore*, *paſt*.

3. Two Futures, note the time *hereafter*:

The first Future simply notes the *time to come*.

The second Future, partly *past* partly to *come*; that is, supposed *past*, yet not *come*.

The Verbs in *-or* have only three Tenses, the Present, Imperfect, and first Future.

A Mood

Notes the manner of Motion. A Verb hath 4 Moods: Indicative, Imperative, Potential, Infinitive.

The Indicative declares the Motion: The Imperative commands it: The Potential shews it possible.

The Potential when a Particle of *wishing* goes afore it, is called also the *Optative* Mood: when the Particle, *if*, *that*, *&c.* comes afore it, it is called the *Subjunctive*.

The Infinitive notes no certain number or person; but is indifferent to all.

It hath usually the Sign *to* afore it, as *to love*.

The Imperative has only the present tense;

The Infinitive, present and perfect.

There are also peculiar to the Latin Tongue

Two Supines. 1. Active in *-um*; 2. Passive in *-u*:

Three Gerunds, that end in *-di*, *-do*, *-dum*:

These all serve in the place of the Infinitive.

The Supine in *um* is used with *ire*, and *iri* for the Future Infinitive.

A Conjugation

Is the varying or declining a Verb through all the affections, persons, numbers, tenses, moods; as it were through so many cases.

There are two forms in Conjugating a Verb.

1. General; through the first and second person of the Theme, the perfect tense, and supine.

2. Special; and that three ways: 1. Through the tenses of the Indicative: 2. through the moods, 3. through the persons. The

The Engliſh Verb

May ſeem to be two-fold:

The one changeth not the *primitive* Vowel but ſometime a conſonant; as *have, had; let.* Of this kind are moſt verbs made of nouns, as *to fire*; or out of other Languages; as *to lick* ΡΡ?, *to call* καλέω, *to invent.*

The other changeth the Vowel; as *do, did; will, would; ſhall, ſhould; may, might; can, could.*

Theſe are Auxiliaries, uſed with all other Verbs, as ſigns to diſtinguiſh the tenſes, throughout the Moods.

	Indic.	Potent.	Infin.
Preſ.	*Do*	*may* or *can*	*to*
Imp.	*did*	*might, could, would, ſhould*	
Fut. 1.	*ſhall* or *will*		
Perf.	*have*	*might* &c. } *have*	*to have*
Ph. p.	*had*	*might* &c. } *have*	
Fut. 2.		*ſhall* or *will* }	

The ſign *had* is ſometimes uſed in the pluperfect Potential; and then includes *poſſibly.*

The Engliſh Imperative puts the ſign *do* afore the ſecond perſon; the ſign *let* afore the third; as *do thou read, let him read.* Without the ſign, it puts the ſecond perſon after the Verb; as *read thou.*

The Uſe of the Signs

1. In the Indicative.

The Preſent neglecteth or uſeth the ſign; as *I love*, or *I do love.*

The Imperfect, with the ſign changeth not the Theme; as *I did love.*

Without the ſign it either takes the formative [*d*] the Letter of the ſign, to the end of the Theme; as *I loved*: or it changeth the Vowel; as *I gave*: or it doth both; as *I ſell, I ſold.* Many times *d* is contracted into *t*; as *bleſſed, bleſt; ſpilled, ſpilt*; ſo, *ſpent* for *ſpended*: And with the change of the vowel; as *taught* for *teached.*

The two other Preters always uſe the ſigns with the formatives; as *I have* or *had loved* or *taught*: And, when the Imperfect changes the Vowel, moſt times they take [*n*] a formative; as *I have given.* Oft-times they only take a vowel differing from that of the Imperfect; as *I ſing*, Imp. *I ſang.* Perf. *I have ſung* or *I ſang.*

T and *k* afore *d* are ſometimes loſt; as *ſeeth, ſod*; *make, made.*

Some Verbs neither uſe formatives nor change their Vowels; as *caſt, cut, hurt, put, ſet, ſhut.*

2. In

2. In the Potential,

The Tenses always use their figne;

The Present and Imperfect keep the Theme; as *I may or can love*; *I might, could, or would love*. Sometimes might, should, are used for may.

The other Tenses, with their own, use also the figne and formative of the perfect Indicative; as *I might have*, or *I shall have, loved, given, sung*.

All verses make the figne of the second person Singular of both Moods to end in [ſt]; as thou doſt, didſt, haſt, hadſt; mighteſt &c. *love*: often [ſt] only [ſ]; as thou wilt *love*. Without the figne they make the second person of the Verb in ſ; as thou *loveſt, lovedſt, ſungſt*.

The Present and Perfect Indicative make the figne of the third person to end in [th] or [s]; as *he doth* or *does, he hath* or *has, loveth*. The figne present without the figne makes the verb end so; as *he loveth*, or *loves*.

The Plural Persons are like the first singular.

The figne being thus explained, here follows the explication of the Verb.

The English Verb *Am*.

The General Form. *Am, was, been, to be.*

The Special Form. Through the Moods.

Through the Tenses.

	Indic.	Imp.	Potent.	Infinit.
Pref.	*Am*	*be thou*	*may be*	*to be*
Imp.	*was*		*might be*	
Fut. 1.	*ſhall be*			
Perf.	*have been*		*might* } *have been*	*to have been*
Pl. p.	*had been*		*might* } *have been*	
Fut. 2.			*ſhall* }	

Through the Persons.

			1. 2. 3.		1. 2. 3.
Indic.	S.	Pref.	*Am, art, is,*	Pl.	*are.*
		Imp.	*was, waſt, was.*		*were.*

The other Tenses vary the ſigns, as afore taught, as *I may, thou mayſt, he; I have, thou haſt, he hath, been* &c.

The

The Verb SUM

Requires the firſt place. 1. From its ſignification; For *Being* is afore *Action*; and it is alſo included in all other Verbs. 2 From its uſe; For it ſerves to make Tenſes Paſſive and Deponent; and is moreover the only Verb Copulant of Nouns; and helps Children firſt to make eaſie Latin.

The Conjugation of the Verb SUM

The Verb Subſtantive in all Languages has a peculiar Form.

General Form. *Sum, es, fui, eſſe.*

Special Form: Through the Moods.

Through the Tenſes.

	Indic.	Imp.	Potent.	Infin.	Part.
Preſ.	*Sum*	*es*	*ſim*	*eſſe*	
Imp.	*Eram*		*eſſem* or *forem*		
Fut. 1.	*Ero*				
Perf.	*Fui*		*fuerim*	*fuiſſe*	
Pl. p.	*Fueram*		*fuiſſem*		
Fut. 2.			*fuero*	*fore*	*futurus.*

Through the Perſons of the Preſent.

		1.	2.	3.		1.	2.	3.
Indicat.	S.	*Sum,*	*es,*	*eſt.*	Pl.	*Sumus,*	*eſtis,*	*ſunt.*
Imper.			*es, eſto,*	*eſto.*			*eſte, eſtote,*	*ſunto.*

All Tenſes beſides the Preſent Indic. and Imperative, both of the Verb *Sum*, and any Verb in [*o*] are varied by the final Letters [*m, i, o*]; after this Type,

	1.	2.	3.		1.	2.	3.
	m,	*s,*	*t.*		*mus,*	*tis,*	*nt.*
S.	*i,*	*iſti,*	*it.*	Pl.	*imus,*	*iſtis,*	*ërunt* or *ëre.*
	o,	*is,*	*it,*		*imus, itis, unt*: *int* in the Potent.		

SUM with its Compounds want the Supin, Gerunds, and Part. Preſent; except *abſens, præſens, potens*; made of *Ens* not in uſe, but *Being* is in uſe.

The Compounds of *Sum* keep the form of the Simple. *Proſum* takes [*d*] between two vowels; as *prodes*: only *Poſſum* varies ſomewhat the flexion, and therefore is placed to the Heteroclites.

The

The Verb in *O* and *Or*.

The Conjugation of a Verb in O

Is known by the Characteriſtic vowel of the Theme in the end of the ſecond perſon. *Priſc. lib.* 8.

There are 4. Conjugations.

The Firſt forms the 2. Perſon in a ſimple or ſhort vowel: the reſt in a Contract or long vowel.

For the Latins, like the Greeks (the Authors of Grammar) ſeem to have two ſorts of Verbs, as of Nouns: 1. Simple. 2. Contract.

The Simple Verb declines the Theme with a ſingle [*i*] as *lego*,-*is*: The Contract Verb changeth [*i*] by thruſting it into another vowel, *a*, *e*, or *i*; as it were, *amao-ò*;-*aïs-âs*; *moneo*,-*eïs-ês*; *audio*,-*iis-îs*. Vid. Lat. Gram.

Nor ought this truth to be harſhly entertained, becauſe hitherto not duly conſidered; neither the ſtrangeneſs of a Latin Verb in *ao* (never in uſe, for the broad ſound) diſcredit the mention of a Contract form; when as *Priſcian* diſtinguiſhes the Latin Conjugations, by imitation of the circumflex vowels in the ſecond perſon of the Greek Verbs; which cannot be underſtood otherwiſe then of thoſe in *ao*, *eo* &c. lib. 8.

What hinders therefore (unles tyrant cuſtom, or unacquaintedneſs with the Originals of Grammar derived to *Rome* from *Greece*, as from *Apollonius* to *Priſcian*) but that for the eaſe of young Learners, whoſe ſmall capacity calls for brief inſtitution, there might be omitted the unreaſonable crambe of gabling over four forms of a Verb; when as one General

form

form, with a short direction to contract the final Vowels, would dispatch the Latin, as it doth the Greek Verb. And indeed the English Idiom seems to advise this method; whose Verb hath one only common form that changeth not the Vowel; as *live, lived*: And the others, though for the most part being Monosyllables they admit not contraction, yet represent the same thing by the change of Vowels; as *give, gave*; *fall, fell*; *get, got*.

It is therefore reasonable to wish, that the *Native* should (as it might) lead to the knowledg of the *Learned Language*: And that there should be only one Paradigme for the Latin, as for the Greek Verb, uncontract; *viz. Lego*: the flexion of both being not altogether unlike, but such as manifests the one to come from the other, with different significations. And then a very few precepts of contraction in either language will distinguish all the other Verbs from the common type: that is, the Circumflex from the Baryton, as the Greeks term them. Here note the Roman keeps the circumflex [*â*] but takes [*ê*] for [*ei*] familiarly; and [*î*] promiscuously for any Vowel; as *audio*, *is* for *ἀυδάω*, *ᾷς* &c. *vid. Lat. Gram.*

Besides the brevity of the Doctrine, the harmony also of the languages will (from experience) speed the progress of the Learner: whose cause may in time incline the Learned Grammarians to consider and promote it; and in the mean time to accept the proposal, and not discourage the present essay toward it.

The Simple Verb ought as in all other Languages, so in the Latin to precede; And the three contract to follow, in order of the vowels *a, e, i*. *Prisc.*

But as at *Athens*, so likewise at *Rome*, the uncontract Terminations by the concourse of Vowels displeased the Ear, and were therefore rejected: yet some remarks of incontraction abide, and are in common use.

This then is the Order of the Latin Conjugations

1. Lego. 2. Amo. 3. Moneo. 4. Audio.

The

The Engliſh Verb Active with the Signs.

1. The Verb that keeps the Vowel; *I live.*

Through the Moods.

Through the Tenſes

	Indic.	Imp.	Potent.	Infin.
Preſ.	*I do live*	*live thou*	*I may live*	*to live*
Imp.	*I did live*		*I might live*	
Fut. 1	*I ſhall live*			
Perf.	*I have lived*		*I might* } *have lived*	*to have lived*
Pl. p.	*I had lived*		*I might* } *have lived*	
Fut. 2			*I ſhall* }	

The Verbs *caſt, cut*, &c. vary only the ſigns.

2. The Verb that changes the Vowel; *I ſing.*

Preſ. *I ſing.* Imperf. *I ſang* [*or did ſing*]. Perf. *I ſung or have ſung.* Pl. p. *I had ſung.* Fut 1. *I ſhall or will ſing.* &c.

Many verbs only ſhorten the vowel; as *bite, bit; feed, fed; ſweat, ſwet.*

The four Conjugations of the Latin Verb in [*o*].

The 1. Conjug. makes the ſecond perſon in *is*; the 2. Conj. in *ês*; the 3. Conj. in *ĕs*; the 4. Conj. in *îs*.

The 1. and 2. Conjug. are not diſtinguiſht in the Theme; both commonly ending in *o* Impure: but the 3. and 4. Conj. are diſtinguiſht by *-e, -i*.

Nevertheleſs ſome Verbs of the 1. Conjugation end in *-io*; *capio, cupio, facio, fodio, fugio, jacio, quatio, rapio, ſapio; gradior, patior, morior*; with their Compounds. Add to theſe *ſpecio, lacio* Verbs out of uſe: alſo the Theme *pario*, whoſe Compounds keep to the 4. Conjugation.

Some of the 2. Conjugation end in *-eo*, ſome in *-io*, moſt made of Nouns. 1. In *-eo*; as *beo, creo, ſcreo; calceo, cuneo, galeo, laqueo, lineo, nauſeo, nucleo.* 2. In *-io*; as *frio, bio; amplio, aſcio, alterio, brevio, concilio, furio, initio, lanio, luxurio, nuncio, pio, propitio, radio, ſatio, ſaucio, ſocio, ſomnio, ſpolio, tripudio, vario, vitio; ſerior, inficior, præmior, ſpatior, ſuavior.*

Two of the fourth end in *-eo*; as *eo, queo*, with their Compounds.

The

The General Form

Of the Four Conjugations through the Theme, the Characteriſtic Perſon, the Perfect and the Supin.

	Conj.	Theme.	Char. Perſ.	Perf.	Supin.
Lego.	1	o,	is,	i,	tum.
Amo.	2	o,	as,	avi,	atum.
Moneo.	3	eo,	es,	ui,	itum.
Audio.	4	io,	is,	ivi,	itum.

The Special Forme.

Through the Moods.

Through the Tenſes.

C.		Indic.	Imp.	Potent.	Infin.	Supin.	Partic.
1	Preſ.	o,	e,	em,	ere,	tum,	ens.
	Imp.	ebam,		erem.			
	Fut. 1	am.					
2	Preſ.	o,	a,	em,	are,	atum,	ans.
	Imp.	abam,		arem.			
	Fut. 1	abo.					
3	Preſ.	eo,	e,	eam,	ere,	itum,	ens.
	Imp.	ebam,		erem.			
	Fut. 1	ebo.					
4	Preſ.	io,	i,	iam,	ire,	itum,	iens.
	Imp.	iebam,		irem.			
	Fut. 1	iam.					
	Three Tenſes of the four Conj. through the Moods.						
	Perf.	i,		erim,	iſſe.		
	Pl. p.	eram,		iſſem.			
	Fut. 2			ero,	tum ire		turus.

The Perſons of the Preſent tenſe in the Indicative are formed by the four Characteriſtic Vowels of the ſecond Perſon.

Through the Perſons of the Preſent tenſe.

The Indicative Mood.

		1.	2.	3.		1.	2.	3.
Lego	S.	o.	i	s. t.	Pl.	mus.	tis.	* unt.
Amo		o.	a					
Moneo		eo.	e					⁊ nt.
Audio		io.	i					unt.

*[i] of the firſt Conjugation is made a in the third perſon plural.

The Imperative Mood.

Lege	S.	* e,	to.	to.	Pl.	te, tote.	unto.
Ama		a,				⁊ nto.
Mone		e,				
Audi		i,				unto.

* The Imperative of the firſt Conjugation uſes [e] for [i] only in the ſecond perſon ſinguiar.

The Imperative of all the Conjugations makes its third perſon from the third of the Indicative by adding [o]

The perſons of the Preſent Potential are uſed for this Mood, by ſuppoſing another Imperative, *ſis, vide, ſint*, &c. So the Future of either Mood.

All other tenſes end in *m, i*, or *o*; and are declined by the literal type afore-going, in the Verb *Sum*.

N B. [*a*] before [*m*] in the firſt Perſon of the future is varyed by [*e*] in the other perſons.

The Verb in *io* of the firſt Conjugation keeps [*i*] as this type directs.

Indicat.	Imper.	Potent.	Part.
Preſ. *io*, 3. pl. *iunt*, Imperf. *iebam, as* &c. Fut. 1. *iam, ies* &c.	3. pl. *iunto*,	*iam, ias* &c.	*iens*.

For

Formation of the Tenſes.

The Preſent is the Theme or root of all other Tenſes. The ſecond perſon of the Preſent, rejecting [*s*] forms the Perfect tenſe and Imperative Mood; of which two the reſt come.

The Perfect Tenſe.

The firſt Conjugation turns *a* into *i*: The other change the contract terminations; *viz.* The ſecond changes *as* into *âvi*: The third *ês* into *ui*: The fourth *îs* into *ivi*.

But the Perfect of the three latter Conj. ſeems rather to be made of the ſecond perſon uncontracted, by injecting [*u*] conſonant in the ſecond and fourth; [*u*] vowel for [*e*.] in the third Conjugation: as it were *am-a-o, -a-ls, -a-i, -a-vi; mon-e-o, -e-ls, -e-i, -e-vi: aud-i-o -i-is, -i-i, -i-vi.*

Some Perfect tenſes double their two former Letters; as *tendo, tetendi*: ſome alſo take [*e*] for the firſt vowel; as *facio, feci; pario, peperi*: ſome [*e*] & [*i*]; as *cano, cecini*.

From the Perfect are formed the other Perfects, the two pluperfects, and ſecond future; by turning [*i*] into *-erim, -iſſe; -eram, -iſſem; -ero*.

The Imperative Mood

Is made of the ſecond perſon of the Theme without [*s*]; as *amas, ama*: but *legis, lege*; Pag. 32.

From the Imperative an additional Syllable forms the remaining tenſes.

In the Indicative

The Imperfect adds to the Imperative *bam*; as *lege, -bam*: but in the fourth Conjugation, *-ebam*; as *audi, -ebam*. The firſt future of the firſt Conjugation turns [*e*] into *am*; as *leg-e-am*: the future of the fourth adds *-am*; as *audi, -am*: the ſecond and third *-bo*; as *ama, mone, -bo*.

In the Potential

The Preſent of the firſt Conjugation turns [*e*] likewiſe into *-am*; as *leg-e, -am*: the ſecond, [*e*] into *em*; as *am-a, -em*: the third and fourth take *-am*; as *doce, audi, -am*.

The Imperfect adds *-rem*; the Infinitive *-re*; as *lege, -rem, -re*.

Formation of the Supine.

The Supine is formed of the Perfect by changing [*i*] into *-tum*; but *-ui* into *-itum*, as *ici, ictum*; *mon-ui, -itum*.

The letter [*a*] changed in the Perfect is here reſtored; as *feci, factum*. Alſo the ſervil [*v*], and the reduplication is omitted; as *ſi-vi, -tum*; *cecini, cantum*: three Verbs *moveo, voveo, juvo* loſe the radical [*v*]; as *mo-vi, -tum*.

[*c*] for *g, q* or the ſervil *x* ſounds better afore *-tum*, as *le-gi, -ctum*.

The Compound Verb

Imitates the form of the ſimple throughout; as *Perleg-o, -is, -i, -tum*: but it omits all reduplication; as *reperio, reperi, repertum*.

The four Conjugations of the Verb in *Or*.

There is no Engliſh Verb Paſſive but what is made of the Verb *am* and the Participle; which is always the ſame with the Verb of the Perfect Active; as *I have loved, I am loved*: And where there are two Perfects or more, that which has the formative [*u*] is moſt uſed; as *I drove, I have driven, I am driven*.

The Latin Verb has three tenſes, made from the like Active:

1. By adding [*r*] to [*o*]; as *lego, -r*: *re* to the Imperative; as *lege, -re*.

2. By changing [*m*] into [*r*] as *lega-m, -r*: [*e*] of the Infinitive into [*i*]; rejecting *er* in the firſt Conjugation; as *leg-ere, -i*; *amar-e, -i*.

The

The General Form

Through the Theme, a Perſon, Infinitive and Supin.

	Conj.	Theme.	Second Perſon	Infin.	Supin.
Legor	1	*or*	*eris* or *ere*	*i*	*tu.*
Amor	2	*or*	*aris* or *are*	*ari*	*atu.*
Moneor	3	*eor*	*êris* or *êre*	*êri*	*itu.*
Audior	4	*ior*	*iris* or *ire*	*iri*	*îtu.*

The Special Form.

Through the Moods.

	C.		Indic.	Imp.	Poten.	Infin.	Supin.	Partic.
Through the Tenſes.	1	Preſ.	*or*	*ere*	*ar*	*i*	*tu*	*tus.*
		Imp.	*ebar*		*erer*			
		Fut. 1.	*ar*			*tum iri*		*endus.*
	2	Preſ.	*or*	*are*	*er*	*ari*	*atu*	*atus.*
		Imp.	*abar*		*arer*			
		Fut. 1.	*abor*			*tum iri*		*andus.*
	3	Preſ.	*eor*	*êre*	*ear*	*êri*	*itu*	*itus.*
		Imp.	*ebar*		*êrer*			
		Fut. 1.	*ebor*			*tum iri*		*endus.*
	4	Preſ.	*ior*	*ire*	*iar*	*iri*	*îtu*	*îtus.*
		Imp.	*iebar*		*irer*			
		Fut. 1.	*iar*			*tum iri*		*iendus.*

The other Tenſes are ſupplied by the Participle and the Verb *Sum.*

		Indicat.	Potent.	Infinit.
Perf	*tus*	*Sum* vel *fui*	*ſim* vel *fuerim*	*eſſe* vel *fuiſſe*
Pl p		*Eram* vel *fueram*	*eſſem* vel *fuiſſem*	
Fut			*ero* vel *fuero*	

The Persons

Of the Present Tense are made by the Characteristic Vowels as in the Active Voice: but the first Conjugation takes [*e*] for [*i*] in the second Person Singular of the Present Indicative.

The Indicative.

		1.	2.	3.		1.	2.	3.
Legor	S.	*or*	*e*	*ris* or *re*, *tur*.	Pl.	*mur*,	*mini*,	**untur*.
Amor		*or*	*a*					*ntur*.
Moneor		*eor*	*ê*					
Audior		*ior*	*i*					*untur*.

* The Active Person in [*t*], makes the Passive by adding [*ur*]; as *legit legunt*, *-ur*.

The Imperative.

		2.	3.		2.	3.
Legere	S.	*e*	*re* or *tor*. *tor*	Pl.	*mini* or *minor*.	*untor*.
Amare		*a*				*ntor*.
Monere		*ê*				
Audire		*i*				*untor*.

The rest form their Persons by the Terminations *-r*, and *-bor*, after this Type.

	1.	2.	3.		1.	2.	3.
S.	*r*,	*ris* or *re*,	*tur*.	Pl.	*mur*,	*mini*,	*ntur*.
	bor,	*beris* or *bere*,	*bitur*.		*bimur*,	*bimini*,	*buntur*.

[*a*] before [*r*] is varied by [*e*] in the future, as in the Active.

Verbs in *-ior* of the first Conjugation keep [*i*], as in the Active type.

The

The Verb Deponent.

Adds to the Type of the Passive the Participles, Gerunds and Supine of the Active.

	Theme	2 Perf.	Int.	Supines		Participles.
Sequor	*or*, *e*	*ris*, or *re*	*i*	1. *tum*;	2. *tu*,	*ns*; *tus*; *turus*; *ndus*
Hortor	*or*, *a*					
Polliceor	*eor*, *e*					
Largior	*ior*, *i*					

The Part. in *-tus* is English by the sign *having*; as hortatus *having advised*,

THE PARTICIPLE

Is a Noun partaking of a Verb.

For it is an Adjective, declined with Gender and Case; and like a Verb implies motion and difference of time.

There be four Participles

Two Active, two Passive, Of either voice, one Present, the other Future. The Pres. Passive is also *Preter.*

The English Active Present ends in *-ing*; the Latin in *-ns.* 1. Conj *-ens.* 2. *-ens.* 3. *-ens.* 4. *-iens.*

The English future hath the sign *willing* or *about to*; the Latin ends in *-urus*; as *willing to read* Lecturus.

The English Passive Present ends in *d*, *t*, or *n*; the Latin commonly in *-tus*; as *read* lectus.

The English Future hath the sign *to be*; the Latin ends in *-dus*; as *to be read* legendus.

The Active Present is declined as *prudens*; the rest as *bonus.*

The Formation of the Participle.

The Present in *-ns* is made of the second person of the Theme by taking [s] afore [i]. 1. *-is, -ens.* 2. *-es, -ens.* 3. *-is, -ens.* 4. *-is, -iens.* Where observe [i] of the 1 Conj. is made [e], [i] of the 4. [ie]. The Future in *-dus* is made from the Present, by turning [s] into *dus*, as *legen-s, -dus.* The Present in *-m*, and the Future in *-rus* are made of the Supine, by turning [m] into [s] and *-rus*; as *lectu-m, -s, -rus.*

The Gerunds

Are the oblique cases of the Participle in *-dus*; for the most part used Actively. Many

Many Latin Verbs vary from the common Rules two ways: 1. Heteroſtoichs change only Letters. 2. Heteroclites change the Flexion.

Heteroſtoich Verbs.

The Perfect Tenſe.

The Conjugation of the Verb ſimple ſeems to be the Original Conjugation, common to all Verbs in their uncontracted ſtate. For it makes its Perfect ſometimes after the Forms of the Contract Verbs in *-avi*, *-ui*, *-ivi*: And alſo the three Contracts uſe the Form of the Simple in *-i*.

In the firſt Conjugation.

Oftimes the Perfect varies the Letter afore [*i*] the Characteriſtic.

1. a conſonant:

H, *g*, *ct* are changed into *x*; as *ve-ho*, *jun-go*, *ſle-ctо*, *-xi*: But [*g*] after *r* is made [*s*]; as *ſpar-go*, *-ſi*: Alſo [*d*] *pure* in many Verbs; as *la-do*, *-ſi*. Some doub'e [*s*]; as *ce-do*, *-ſſi*.

P takes [*ſ*] euphonic; as *ſcalp-o*, *-ſi*: So *ſcribo*, *nubo*; turning [*b*] into [*p*] of the ſame Organ.

M in ſome Verbs takes *pſ*; as *ſum-o*, *-pſi*.

2. a vowel:

[*o*] after a ſingle [*l*] is made *-ui*; as *col-o*, *-ui*: and after ſome other Conſonants; as *ſtrep-o*, *-ui*; *gem-o*, *-ui*.

[*o*] in a few is made *-ivi*; as *pet-o*, *-ivi*: *tero*, *trivi* loſes [*e*].

3. conſonant and vowel:

Verbs in *-no*, or *-ſco*, loſing the Conſonants, turn [*o*] into *-vi*; as *ſi-no*, *no-ſco*, *-vi*: *ſperno*, *ſprevi* tranſpoſes [*e*]; *ſterno* makes *ſtravi*.

To theſe adde *qua-ro*, *-ſivi*; *po-no*, *-ſui*; *gigno*, *genui*; *pello*, *pepuli*.

In the ſecond Conjugation.

Some Verbs make the Perfect in [*ſ*] like the firſt Conj. as *juvo*, *juvi*: and with reduplication; as *do*, *dedi*. Others make *-ui* like the third Conjug. as *domo*, *-ui*.

In

In the third Conjugation.

Many form the Perfect in [*s*] as of the first Conjug. Thus *-veo* makes *-vi*; as *mov-eo, -i*: and some in *-deo*; as *vid-eo, -i*.

Some change the Consonant also: *-geo* impure is made *-si*; as *al-geo, -si*. Likewise *ri-deo, -si*; *jub-eo, -ssi*: and others. A few make *-xi*; as *lu-ceo, lu-geo, -xi*.

In the fourth Conjugation.

Some Verbs have the form of the first Conj. in [*i*]; as *veni-o, veni*.

Impure *-cio* makes *-si*; as *far-cio, far-si*: and others; as *sen-tio, -si*. After [*n*] *-cio* is made *-xi*; as *vin-cio, -xi*.

Only *amic-io*, makes *-ui*; like the third Conjugation: *sal-io, -ii*, rather then *-ui*.

Heteroſtoich Supin

Many Supines change the Letters of their Perfect.

1. a consonant:

The terminals *-di, -li, -ri, -ſi*, are made *-ſum*; as *vi-di, feſel-li, cucur-ri, ſue-ſi, -ſum*. Others double the [*s*], as *fo-di, mi-ſi, -ſſum*.

After a mute, and sometimes after a half Vowel, [*s*] vanishes; as *ſcrip-ſi, ſcr-ſi, tum*.

2. a vowel:

The perfect in *-ui* makes *-itum*; as *mon-ui, -itum*, but *-ui* from *-vo* produceth *-ûtum*; as *ſtat-ui, vol-vi, -ûtum*.

Some turn [*s*] or *vi* into *-um*; as *flex-i, ſingul-ivi, -um. Cenſu-i, meſſu-i, -m.*

3. a consonant and vowel:

As *colui, cultum*; *torrui, toſtum*.

Heteroſtoich Compound Verbs.

Preſent Tenſe.

Compoſition ſometimes deſtroys a letter of the Verb; as *dego* for *deago*; *pergo* for *perrego*. Oftimes it changes the firſt Vowel, [*a*] into [*e*] or [*i*]; as *pario, aperio: cano, concino*: a few change [*a*] into [*u*]; as *calco, inculco*; or loſe [*u*]; as *quatio, excutio*.

Perfect Tenſe.

Some Compounds change the Vowel of the Theme, but not of the Perfect; as *conſideo, conſedi*: Contrariwiſe ſome change only the Perfect; as *nec-o, -as, -avi*; *enec-o, -as, -ui*.

Do in compoſition recedes from the ſecond to the firſt Conjug. and makes the perfect in *-didi*; as *ad-do, -dis, -didi*: *Sto* likewiſe makes *ſtiti*; as *ad-ſto, -ſtas, -ſtiti*.

The Compounds of *cano* and *pario*, turn (*i*) into *ui*; as *concin-o, aper-io, -ui*: But *comper-io, reper-io, -i*.

Supine.

Some Compounds change the vowel of the ſimple Theme, but not of the ſimple Perfect, or of the Supin; as *ex-igo, -egi, -actum*.

The Compounds of *capio, facio, jacio*, that change the Vowel of the Theme, and not of the Perfect, keep the vowel of the Perfect in the Supine; as *con-cipio, -cepi, -ceptum*.

The Compounds of *cano, rapio, teneo* change the Vowel of the Theme into (*i*) through all the Tenſes, but take (*e*) in the Supine; as *con-tino, -tinui, -tentum*.

Laſtly the Compounds of *ſalio* make *-ſultum*; of *ſero, -ſevi, -ſitum*; of *do, -didi, -ditum*.

Heteroclite Verbs

Areof three ſorts, like the Noun: Redundant, Deficient, Variant.

The Engliſh Heteroclite.

Redundant.

In all Tenſes.

The Active Verb, beſides the proper formation of its own Tenſes, may be formed alſo by its own Participle in *-ing* and the Paſſive ſigns; as *I teach* or *am teaching*, *I taught* or *was teaching*. &c.

In the Perfect and Pluperfect.

Some Verbs are uſed with the Paſſive ſigns for the Active Perfect and Pluperfect; as *I have* or *am come* veni; *I had* or *was come* veneram.

In the Perfect.

Many Verbs abound in the Active form; as Preſ. *drive*, Imperf. *drave* Perf. *drove*, *driven*. Preſ. *cleave*, Imperf. *clave*; Perf. *cleft*, *clove*, *cloven*.

In ſignification.

Many Actives are uſed neutrally; as *I burn* uro, ardeo.

So is the Participle in-*ing* after the Verb *am* and a Nominative of the thing; uſually Latin'd by a Paſſive; as *the money is telling* pecunia numeratur; *the play is acting* agitur fabula.

Deficient.

Verbs of one Tenſe.

Preſent. *I wot*, *wis* or *wiſt*, *I trow* opinor. *I muſt* debeo. *Quoth I* inquam. Imperative; *hail* ave, avete.

Variant.

Preſ. *I go*, Imperf. *I went*, Perf. *I have* or *am gon*.

The

The Latin Heteroclite

Redundant.

Preſent; as *ſtrideo, ſtridi*; *mereor, mereo.*

Perfect; as *lino*; *lini, livi, levi.*

Future: The Ancients made a double future of the fourth Conjugat. the uſual in *-iam*, the leſs frequent in *-ibo*; ſuch as *ſcibo, ſervibo.* Terent. *Mollibo.* Horat.

Supine; as *miſtum* & *mixtum.* Infin. as *emor -i, -iri.*

The Infinitive of the third is uſed as of the firſt Conjug. by the Poets; *viz. fulgire, fervire.* Virg. So the Imperative; as *cavĕ.* Ovid.

The Verb *potior* of the 4. Conj. follows ſomewhere the flexion of the firſt, as *potitur* Virg. *poteremur* Ovid.

The Verb *Edo* borrows redundant perſons from *Sum.* Præſ. Indic. *es, eſt.* Pl. *eſtis.* Imperat. *es.* Pl. *eſte.* Infinit. *eſſe.* Potent. Imperf. *eſſem, -es, -et,* Pl. *-ent. Editur, eſtur.* Particip. *com-eſus, -eſtus.*

Deficient.

The Impersonal

In Engliſh is known by the ſign *it*, as, *it behoveth*: the Latin ends in [*t*], varied only in the third Perſon, as *oportet.*

The Type of the Impersonal Verb.

	Indic.	Potent.	Innn.
Preſ.	*et*	*eat*	*ere.*
Imp.	*ebat*	*eret*	
Fut. 1. *Oport-*	*ebit*		
Perf.	*uit*	*uerit*	*uiſſe.*
Pl. pf.	*uerat*	*uiſſet*	
Fut. 2.		*uerit*	

Liquet wants the Perfect tenſe.

Many Verbs Perſonal of the Paſſive voice are uſed Impersonally, as *dicitur, fertur*, &c. *-ebatur* &c.

The Verb neuter forms Impersonals of both voices; as *ſtat, ſtatur.*

The Impersonal Verb is used with all Persons in the Oblique Cases of both Numbers.

Personals Deficient.

Verbs without the Perfect:

1 Polysyllables in *-ſco*, and *-urio*; as *ferveſco; nupturio.*

2 Particular Verbs; as *cerno, ferio, furo, tollo, tundo, vado*; and others.

Verbs without the Supine:

1. Verbs that have no Perfect.

2. Most neuters of the third Conjugation in *-ui*; as *ſplendeo; caleo, careo, doleo, valeo*, &c.

3. Particulars; as *algeo, ferveo, timeo, metuo, tremo, diſco, poſco*, &c.

Deficient in ſundry Tenſes.

Cæpi, odi, memini, quæſo, aio, ſalve, aveo, inquam, Auſim, faxim & faxo, ſiem, duit, explicit, infit.

Cæpi, odi, memini, want the Preſent, Imperfect and firſt Future: But *Memini* has the Imperative *memento, -tote*; and has no Participle.

Otherwiſe all three are thus declined.

	Indic.	Potent.	Infin.
Perf.	*i*	*erim*	*iſſe.*
Pl. p.	*eram*	*iſſem*	
Fut. 2.		*ero*	

There are alſo theſe Participles *cæptus, oſus; cæpturus, oſurus.* And Supins *cæptum, -u.*

Inquam (*inquio* ſeldom) *-is, -it, -imus, -itis, -iunt.* Imperat. *inque, -ito.* Potent. *inquiat.* Part. *inquiens.* Imperf. *inquiebat, -ant.* 1 Fut. *inquies, -iet, -ient.* Perf. *inquiſti.*

Aio,

Aio, -is, -it; -imus. Imperat. *aï.* Potent. *aias, -at; -amus, -ant.* Imperf. *aiebam, -as,* throughout. Perf. *aiſti, aiſtis.* Part. *aiens.*

Salve, -to; -te, -tote. Infin. *ſalvere.* 1 Fut. *ſalvebis, -it.*

Verbs of one Tenſe.

Aveo, (to deſire) *-es* &c. perfectly. Imperat. *Ave* joy to you, *-eto, -ete.* Infin. *avere.* Part. *avens.*

Faxo, and *faxim; aſſim, -is, -it, -int;* there is read *faxitis.* Liv.

Siem, -es, -et, -ent; chiefly in the Comædies; as alſo *duit, duint.*

Verbs of one Perſon.

Quæſo, quæſumus: infit: explicit.

The 1. Perſon, *for, dor,* are not uſed; nor the 2. *ſci, dice, duce, face;* but *ſcito, dic, duc, fac.*

Variant or Anomalar Verbs.

Poſſum, Malo, Volo, Nolo, Queo, Eo, Fero, Fio.

The ſix former have ſome tenſes of an unuſual Form; the two laſt borrow from an unuſual Theme.

Poſſum

Is made of *Potis Sum.* It takes [*t*] afore a Vowel; [*ſ*] afore [*ſ*]; as *potes, poſſe;* & wants the Imperative.

The General Form. *Poſſum, potes, potui, poſſe.*

The Special form. Through the Moods.

	Indic.	Potent.	Infin.	Part.
Preſ.	*Poſſum*	*Poſſim*	*Poſſe*	*Potens*
Imp.	*Poteram*	*Poſſem*		
Fut. 1.	*Potero*			
Perf.	*Potui*	*Potuerim*	*Potiſſe*	
Pl. p.	*Potueram*	*Potuiſſem*		
Fut. 2.		*Potuero*		

Through

Through the Perſons of the Preſent Indicat.

	1.	2.	3.		1.	2.	3.
S.	*Poſum*	*potes*	*poteſt*	Pl.	*Poſumus*	*poteſtis*	*poſſunt*

The reſt are declined by the literal type, *m*, *i*, *o*.

Volo, Nolo, Malo.

Volo & its Compounds *Nolo* [i.e. *non volo*] *malo* [i.e. *magis volo*] in the preſent chiefly vary the Perſons; & imitate the Vowels and form of the Verb *Sum:* Otherwiſe regularly declined. Only *Nolo* has the Imperative, and that of the fourth Conj.

General Form

Volo,	*vis,*	*volui,*	*velle.*
Nolo,	*nonvis,*	*nolui,*	*nolle.*
Malo,	*mavis,*	*malui,*	*malle.*

Special form. Through the Moods.

	Indic.	Imp.	Potent.	Infin.	Particip.
Preſ.	*Volo*	*Noli*	*Velim*	*Velle*	*Volens.*
	Nolo		*Nolim*	*Nolle*	*Nolens.*
	Malo		*Malim*	*Malle*	*Malens.*
Imp.	*Volebam*		*Vellem*		
	Nolebam		*Nollem*		
	Malebam		*Mallem*		
Fut 1.	*Volam*				
	Nolam				
	Malam				
Perf.	*Volui*		*Voluerim*	*Voluiſſe.*	
	Nolui		*Noluerim*	*Noluiſſe*	
	Malui		*Maluerim*	*Maluiſſe*	
Pl. p.	*Volueram*		*Voluiſſem*		
	Nolueram		*Noluiſſem*		
	Malueram		*Maluiſſem*		
Fut 2.			*Voluero*		
			Noluero		
			Malucro		

Through the Perſons of the Preſent Indicative.

	1	2	3		1	2	3
S.	*Vola*	*vis*	*vult*	P.	*volumus*	*vultis*	*volunt*
	Nolo	*nonvis*	*nonvult*		*nolumus*	*nonvultis*	*nolunt*
	Malo	*mavis*	*mavult*		*malumus*	*mavultis*	*malunt*

The letters *m*, *i*, *o*, decline the reſt.

Eo.

A Verb of the fourth Conjugation little differs from the regular form.

The General Type. *Eo, is, ivi, itum.*

The Special. Through the Moods.

	Indic.	Imp.	Potent.	Infin.	Supin.	Particip.
Pref.	*Eo*	*I*	*Eam*	*Ire*	*Itum*	*Iens.*
Imp.	*Ibam*		*Irem*			
Fut. 1.	*Ibo*					
Perf.	*Ivi*		*Iverim*	*Iviſſe*		
Pl. p.	*Iveram*		*Iviſſem*			
Fut. 2.			*Ivero*			*Iturus.*

The Compounds ſometimes make the Fut. in *-iam*; as *ineo* Fut. *inibo* and *iniam*. *Ambio* wholy like *Audio*.

Such Compounds as ſignify Actively take [*r*] to be Paſſive; as *prætereo, -eor.*

The perſons are formed as in the regular Verbs; but before [*u*], [*e*] returns; as *eunt, eunto.*

The Participles in the oblique caſes, and the Gerunds uſe *eü* for *ië*; as *eüntis, eündi.*

Queo

Like *Eo*, in the Tenſes it hath.

Queo, quibam, quivi, quibo; queam, quirem, quiviſſem: quitus. Some other in the Compound; *nequeo, nequire.*

Fero

Fero

Borrows the Perfect *tuli*, with the derivative tenſes, from an obſolete Verb *tulo*: The Supine *latum* [for *tlatum* from the Greek τλατὸς]. It looſes the Vowel after [*r*], where the type ſhews.

The General Form. *Fero, fers, tuli, latum.*

The ſpecial Form. Through the Moods.

	Indic.	Imp.	Potent.	Infin.	Supin.	Particip.
Preſ.	*Fero*	*Fer*	*Feram*	*Ferre*	*Latum*	*Ferens.*
Imp.	*Ferebam*		*Ferrem*			
Fut. 1.	*Feram*					
Perf.	*Tuli*		*Tulerim*	*Tuliſſe*		
Pl. p.	*Tuleram*		*Tuliſſem*			
Fut. 2.			*Tulero*		*Latumire*	*Laturus.*

Through the Perſons of the Preſent Tenſe.

		1.	2.	3.		1.	2.	3.
Indi.	S.	*Fero,*	*fers,*	*fert.*	Pl.	*ferimus,*	*fertis,*	*ferunt.*
Imp.			*Fer, -to,*	*ferto.*			*ferte, -tote,*	*ferunto.*

Feror.

Through the Moods.

	Indic.	Imp.	Poten.	Inf.	Supin.	Particip.
Preſ.	*Feror*	*Ferre*	*Ferar*	*Ferri*	*Latu*	*Latus.*
Imp.	*Ferebar*		*Ferrer*			
Fut. 1.	*Ferar*				*Latum iri*	*Ferendus.*

Latus with the Verb *Sum* ſupplies the other tenſes regularly.

Through

Through the Persons of the Present Tense.

			1.	2.	3.		1.	2.	3.
Ind.	S.	*Fer*	*-or;*	*-ris,*	*-re;*	*-tur.*	P.	*-imur,*	*-imini,*	*-untur*
Imp.	S.			*-re,*	*-tor;*	*-tor.*	P.	*-imini,*	*-iminor,*	*-ntor*

All other Tenses Active are Passive are regularly formed by the final Letters.

Fio.

Uses the Participles and Supines of the obsolete Verb *facior*; and with the Verb *Sum* and *factus* forms three Passive Tenses: The rest as the fourth Conjug. except *fierem, fieri.*

The General Form. *Fio, fis, fieri, factu.*

The Special Form. Through the Moods.

	Indic.	Imp.	Potent.	Infin.	Supin.	Partic.
Pres.	*Fio*	*Fito*	*Fiam*	*Fieri*	*Factu*	*Factus*
Imp.	*Fiebam*		*Fierem*			
Fut. 1.	*Fiam*				*Factum iri*	*Faciendus*

The Perfect *Factus sum* &c. regular.

The Persons also like the regular Verb.

Irregular Participles.

Many Participles are Heterostoichs, that change the Letters of the Verb; as *gradior, gressus*: *ni-tor, ni-xus, -sus.*

Some Participles are Heteroclite, that is, irregularly formed; as *ulciscor, ultus*; *morior, mortuus*; *nascor, nasciturus.*

There are also Nouns that end like Participles; as *valiturus, solitus*, &c. which because they have no Supine to be made of, nor Passive Verb to belong to, are fitly called *Participials*. Others not unlike, as *togatus, tunicatus*, are truly *Nominals*.

AN

AN ADVERB

Is an Indeclinable word, joyned to a Noun or Verb, to perfect or declare the ſenſe.

The Adverb is of two kinds:

1. Quality. 2. Quantity.

For a word ſignifying either of theſe two, if it be not a Noun, is an Adverb.

An Adverb of Quality; as clam, clanculum *privily*, or *unknown to*; penes *in the power*. It is either:

1. A Nominal, that ſignifies *perfection* or *imperfection*; as bene *well*; malè *ill*:

Theſe derivatives in Engliſh end for the moſt part in *-ly*; the Latin, in *e*, *o*, *ter*, *im*, *us*; as doctè *learnedly*; conſultò *adviſedly*; fortiter *valiantly*; priyatim *privately*; funditus *utterly*.

A Noun repeated with *by*, *for*, *from*; may beſt be Latined by an Adverb in *-tim*; as virtùm *man by man*; verbatim *word for word*; oſtiatim *from door to door*; paulatim *by little and little*; alſo ſtatim *by and by*.

2. An Adverb of *Agreeing* or *Likenes*; as Secundùm *according to*; erga *towards*; ut, ceu *as*; ſic, ita *ſo*.

3. Of *Oppoſing* or *Unlikenes*; as adversùs, adversùm *againſt*.

4. Of the *Cauſe*; as propter *for*.

An Adverb of Quantity; as penitus *throughly*.
Either of Magnitude, or Multitude.

The Adverb of Magnitude.

1. Of *Amplifying*; as valde *very*; magis *more*; ſatis *enough*; abunde, affatim *hugely*; nimis *too much*.

2. Of *Diminiſhing*; as parum *little*; vix *ſcarce*; ſerò, penè, ferme *almoſt*.

3. Of *Time*; as cùm, quando *when*, nunc, jam *now*; tunc, tum *then*; dum *while*; dudum *ere while*; nuper *a while ago*, interea *in the mean while*; tandem *at length*; ſæpe *often*, uſque *until, even to*, ſemper *always*; nunquam *never*; hodie *to day*; heri *yeſterday*; pridie, pridem *the day afore*; cras *to morrow*; poſtridie *the day after*; perendie *two days hence*; manè *in the morning*, veſperi *ith' evening*; tempori *in time* or *ſeaſon*.

4. Of *Place*; as coram *before*, ponè *behind*, prope, juxta, ſecus *nigh*, circa, circiter *about*, cis, citra *on this ſide*, extra *without*, infra *beneath*, ſupra *above*; ultra *beyond*, procul *far*, ſubter *under*; tenus *up-to*; verſus *towards*.

Some of this ſort, with diſtinct Latin endings ſignify:

1. *In a place*; as hìc *here*, ibi *there*, ubi *where*, apud *at*, intra *within*, uſquam *any where*, nuſquam *no where*; foris *abroad*, obviàm *in the way*, obiter *by the way*.

2. *From a place*; as hinc *hence*, inde *thence*.

3. *To a place*; as huc *hither*, horſum *hitherward*, illò *thither*.

4. *Through a place*; as hàc *this way*, quácunque *any way*.

Under the Adverb of *Place* are ranked three others.

1. Of *Aſſembling*; as ſimul, unà *together*, præſtò *at hand*.

2. Of *Separating*; as ſeorſim *aſunder*, ſinè, abſque *without*.

3. Of *Order*; as porrò *moreover*; deinde, deinceps *next, ſo on*; denique *laſtly*.

The

The Adverb of *Multitude.*

1. Of *Number*, as ſemel *once*; bis *twice*; ter *thrice*. The reſt in Engliſh expreſt with [*-times*]; quater *four-times*: The Latin end in [*-ies*]; quinquies *five-times*; ſexies *ſix-t.* ſepties *ſeven-t.* octies *eight-t.* novies *nine-t.* decies *ten-t.* undecies 11-*t.* duodecies 12-*t.* ter & decies 13-*t.* quater & decies 14-*t.* quindecies 15-*t.* ſex decies 16-*t.* decies & ſepties 17-*t.* decies & octies 18-*t.* decies & novies 19-*t.* vicies 20-*t.* tricies 30-*t.* quadragies 40-*t.* quinquagies 50-*t.* ſexagies 60-*t.* ſeptuagies 70-*t.* octogies 80-*t.* nonagies 90-*t.* centies 100-*t.* ducenties 200-*t.* trecenties 300-*t.* quadringenties 400-*t.* quingenties 500-*t.* ſexcenties 600-*t.* ſeptingenties 700-*t.* octingenties 800-*t.* nongenties 900-*t.* millies 1000-*t.* bis millies 2000-*t.* ter millies 3000-*t.* *&c.*

Alſo the Engliſh ends in-*fold*, *as much* or *ſo much*; the Latin in-*plò*, *pliciter*; as duplò-pliciter *two-fold*; or *twice as much*, &c.

2. Of *Speech*; as verbatim *word by word*; articulatè *every Syllable*,

The variety of this Adverb may be reduced to two heads:

Common Speech, of *Words*; or *Natural* Speech, of *Paſſion.*

Adverbs of Common Speech are cheifly three:

1. Of *Affirming*; as næ, imò *yes*; quidem, profectò *truly*. Under this kind are contained Adverbs

Of *Exhorting* or *intreating*; ſpecially Verbals, as agè *go to*; ſodes, amabò *prethee*; cedò *gi' me*. Of *Declaring*; as en, ecce *behold*; ſcilicet *to wit*. Of *Swearing*; as pol, medius fidiùs. Of *Wiſhing*; as utinam *would that*.

2 Of *Denying*; as non, haud, ne *no*, *not*; nedum *much leſs*, *not only ſo*.

3 *Asking* or *Doubting* [i. e. neither Affirming nor Denying]; as cur *why*; num, an *whether*.

Many Adverbs of several Classes, used by way of Question, belong to this of *Asking*; as quando *when*? ubi *where*? &c.

Adverbs of *Passion* (rather *sounds* then *words*) vulgarly called *Interjections*; such are *Breakings out*

Of *Joy*, ha, ha, ha; ohe, io, io. Of *Grief*, ô, væ, ah, hei, heu. Of *Calling*; ô, eho, heus. Of *Exclaiming*; proh, hem. Of *Refusing*; au, vah.

An Adverb is 1 Primitive; *ut*: Derivative; *ut*. 2 Simple; *din*. Compound; *hodie*. Decompound; *perendie*.

Divers Adverbs in English are made of the sign [*a*] with a word; as *a part* pars, *a side* latus; *apart*, *aside* seorsim; *a way* via; *away* apage. Also *to*; as *toward* tueri, *toward* versus.

Neuter Adjectives are used for Adverbs; as multùm *much*. Seldom Masculines; as *hìc*. Substantives, or Faminine Adjectives in the oblique case; as luci *ith' day*; bifariàm *two-fold*.

There are Particles used in the English Idiome that are not to be Latin'd, but may be call'd *Signs* or *Expletives*; of the latter sort are [*there*, *it*] plac't afore the Verb [*is*] in the beginning of a clause.

A PRÆPOSITION

Is an Indeclinable word, that is uſed in *Compoſition* with any word; but precedes only a Noun in *Appoſition.*

The Præpoſition is either Inſeparable, always joyn'd; or Separable, ſometimes aſunder.

The Latin inſeparables are commonly five: am *about*; com *together*; dis, ſe *apart*; re *again.*

Two other Nominals that only compound Nouns; ne, ve *without.*

There are alſo divers Engliſh; *un, fore, mis, be, gain* for *againſt*; as *to undo, foreſee, miſtake, beſet, gainſay.*

The Latin Separables are 20.

Monoſyllables 14: a, ab, abs *from*; cum *with*; de *concerning*; e, ex *of*; ob, pro *for*; per *by*; poſt *after*; præ *before*; ſub *under*; trans *beyond.*

Diſſyllables 6: ante *before*; circùm *about*; contra *againſt*; inter *between*; præter *beſide*; ſuper *upon.*

All others, vulgarly called Præpoſitions, that do not *compound*, may be eſteemed Adverbs. *Priſc.* lib. 14.

The Engliſh commonly hath the Particle compounding after it; as exeo *to go forth*; abeo *to go from*; adeo *to go to*; convenio *to come together.*

Moſt Præpoſitions *change, loſe,* or *take* a letter in compoſition, for better ſound.

1 Inſeparables.

Am, con, dis change a letter.

Am afore *c, ſ, b,* turns *m* into *n*; as *anceps, anfractus, anhelo.*

Con turns *n* into *m* afore *b, p*; as *combibo, compono*: and into *l, m, r* afore the like; as *colligo, commoveo, corrigo*: alſo into the Greek *g*, that was not in the Latin ſimple; as *cognoſco* from [γνόσκω] *noſco.*

Dis turns *s* into *f* following; as *differo*: once into *r*; as *diremo.*

Con, dis loſe a Letter.

Con afore a vowel, or *h*; as *coerceo, cohæreo*; except *comes, comedo.*

Dis loſes *s* before a liquid or *g*; as *dilue, digero.*

Am

Am, re take a Letter.

Am takes *b* afore a vowel; as *ambigo*: so *em* afore *me*; as *emburo*.

Re takes *d* afore a vowel, or *b*; as *redeo, redibeo*.

2 Separables.

Many change their Conſonant.

Ad, ob, ſub, in, ex, per, inter make the laſt like to the firſt following.

Ad afore *c, ſ, g, l, n, p, r, t, s*; as *accurro, affero, aggero, agnoſco*, &c.

Ob, ſub afore *c, f, g, p*; as *occurro, ſuccurro, offero, ſuffero* &c. Alſo *ſu* afore *r*, and ſometimes *m*; as *ſurripio, ſummoveo*.

In (like *en*) afore *b, p, l, m, n, r*; as *imbibo, impono, illigo, irrigo, ignoſco*.

Ex afore *ſ*; as *effero*.

Per, and *inter* ſometimes afore *l*; as *pellicio, intelligo*.

Ab, ob, ſub make ſometimes the laſt letter different to what follows.

Ab, ob, ſub turn *b* into *s* in theſe compounds, *aſporto, aſſumo, ſuſtineo, ſuſcipio*.

Ab afore *ſ* makes the diphong *au*; as *aufero*.

Circum takes oftentimes *n* for *m*; as *circunago*.

Many of the afore-mentioned changes are oft neglected; as *adſum, obſirmo, ſubmitto, perlego*.

Some Præpoſitions loſe the Conſonant:

Ad, ob, trans, poſt, per.

Ad afore *ſc, ſp, ſt*; as *aſcendo, aſpiro, aſto*: alſo *aperio*.

Ob, ſub in theſe *omitto, operio, ſuſpicio*.

Trans loſes *s* afore it's like; as *tranſlio*: as afore *d* and *j* conſonant; as *trado, traſicio*: ſometimes afore *n*; as *trano*.

Poſt loſes *ſt* afore *m*; as *pomeridianus*.

Per loſes *r* in the compound *pejero*.

Some take a Conſonant.

Pro takes *d* afore a vowel; as *prodigo*: *In* like *wiſe* afore *egeſtas*; as *indiges*.

The uſe or placing of ſome Separables.

1. In Appoſition.

[*Ab*] goes afore a vowel, or *b*: [*abs*] ſometimes afore *q, t, s*: [*a*] commonly afore the reſt.

[*E*] precedes a conſonant; [*ex*] almoſt any letter.

2 In Compoſition.

[*A*] before *m* or *v* conſonant; as *amoveo, avello*: [*abs*] afore *c* or *t*; as *abſcindo, abſtineo*: [*ab*] afore the reſt; as *abdo, abeo*.

All the other Præpoſitions come afore any letter.

The Preposition changes ſometimes the Simple *Active* to a *Neuter* compound; as *mergo, emergo*: and contrariwiſe *Neuter* to *Active*; as *eo, praeeo*.

A CONJUNCTION

Is an Indeclinable word that joynes clauſes or ſentences together.

There be two kinds of Conjunctions:

1 Copulative; et, que *and*: with their negations; nec, neque *nor, neither*.

For the Particle, as well negative as affirmative affects both members of the ſentence.

To the *Copulative* belongs the Conjunction

Cauſal; ut, quòd *that*.

Conditional; ſi *if*.

Illative; ergo, igitur *therefore*.

Adverſative, or *Correſpondent*; quamvis, tamen *although, yet*; ut, ſic *as, ſo*: tam, quam; tum, tum; cum, tum *as, as*; quidem, verò *truly, but*.

2 Disjunctive; aut, vel *or*.

To the disjunctive belong

The *Diſcretive*; ſed, autem *but*.

The *Exceptive*; niſi *unles*.

Note: though the terms *Conjunction Copulative* ſeem a Tautologie, and *Conjunction Disjunctive* a Contradiction; yet reaſon juſtifies both appellations. For conſider, the very Conjunction implies two into one; that is, two diſtinct members to be conjoyned into one Speech.

The Copulative therefore unites the words, & divides the ſenſe; repreſenting a double truth under one continued form of Speech; as Cicero eſt Orator & Cicero eſt Conſul *Cicero is an Orator and Cicero is a Conſul.*

The Disjunctive divides the words, and unites two ſignifications to make one truth; Aut eſt dies aut eſt nox *either it is day or it is night.*

Oftimes ſeveral clauſes are implyed, as it were under one ſentence; as Cicero eſt Orator et Conſul: vel dies vel nox eſt.

A The Conjunction is 1. Primitive, *ut*: Derivative, *quòd*.

2 Simple; *et, ſi*: Compound; *etſi*: Decompound; *tametſi*.

Some

Some Particles are Præpoſitive, that always begin the clauſe; as *et, vel, nam, ſed* &c. Others Poſtpoſitive, that require a word before them; *que, ve, enim, verò, quidem.* The reſt may begin or follow.

The Adverb [*not*] coming after the Engliſh Verb is to be ſet before the Latin.

Moreover the ſame Particle may be of a diverſe order according to the diverſity of *ſignification* or *uſe*; as ubi *where* or *when*, ibi *there* or *then*.

If the Particle reſpects only a *ſingle word*, it is an Adverb; *viz.* ut *as*, a Particle of *Likeneſs*: if *two clauſes*, it is a Conjunction; *viz.* ut *that*, a *Cauſal*: The ſame ut *as*, in reference to ſic *ſo*, is a Correſpondent.

Likewiſe cum *when*, an Adverb; cum *with*, a Præpoſition; cum *both* [in reference to tum *and*] a Conjunction.

A SENTENCE

Or Conſtruction of Words.

A Sentence chiefly conſiſts of the Verb [*Am*] between two *Nouns*: the *former* always a *Subſtantive*; as *God is good.*

The Subſtantive ſignifies either a *perſon* i.e. God, Angel or Man: or elſe a *thing*; as *Heaven.*

The Interrogative [*who*] finds the Perſon afore the Verb: [*whom*] after it; as *Chriſt redeemed man. Who redeemed? Chriſt: whom? man.*

The Interrogative [*what*] finds the *thing* afore or after the Verb; as *Love fulfills the law. What fulfills the law? love. What does love fulfil? the law.*

The Verb [*Am*] *Subſtantive* or *Sign Paſſive* ſhews it ſelf: Other Verbs are found by the Signs *do, did,* &c.

The Relative it ſelf is to be made an Interrogative; as *'tis Faith, that ſaves. What ſaves? Faith.*

The Verb *agrees* with the Noun afore it; and *governs* the Noun after it.

All other words adhere unto the Verb or Noun, to amplify, explain or perfect the ſentence.

There is therefore conſiderable in a ſentence; 1. *Agreement*: 2. *Government*: Either of them is twofold.

The firſt Agreement is between a *Subſtantive* and a *Verb*: The ſecond between a *Subſtantive* and an *Adjective*; under which is contained, what is vulgarly called the third Concord between the Subſtantive *Antecedent* and the Article *Relative.*

The firſt Government puts the *Noun* in the due *Caſe*: The ſecond puts the *Verb* in the right *Mood.*

AGREEMENT

1. The Verb agrees with the Nominative case in *Number* and *Person*; as *there is a report* rumor est. *Ter.* *A Mountain is in labour, out comes a Mouse* mons parturit, nascitur mus. *Adag.* *The Trojans are wise too late* serò sapiunt Phryges. *Adag.*

2. The Adjective agrees with its Substantive in *Gender*, *Number*, *Case* and *Person*; as *a quick wit*, *desperate impudence*, *nimble tongue* Ingenium velox, audacia perdita, sermo promptus. *Juven.*

A Substantive also agrees with a Substantive in *Case*, when they both relate to *One*; as *the City Athens* Urbs Athenæ.

Many times a Verb comes between the two Nouns, as *old age is a disease* senectus morbus est. *Ter.* *virtus hæreditas* virtus æterna habetur. *Sall.* *This is the bird that dying sings* hæc est illa avis quæ moriens canit: Here note;

Both the *Articles*, and the *Pronoun* and *Participle*, like the Adjective, agree with the Substantive.

Nevertheless the case of the Relative oftner agrees not with the case of the Antecedent; but depends upon the word next to it in sense; always implying and used as the Substantive, to which it relates.

The case therefore of the Relative cannot be exemplified, but is to be understood from the Government of a Substantive, which is hereafter taught.

The Relative begins the clause: So do *quis*, *quanto*, *quantus*, *quotus*, *uter*, and are used like it.

Observations upon the two Agreements.

The Verb Substantive is oft omitted in all Languages; viz. *as the Master*, *so the Man* ut Dominus ita Servus. *Adag.* *As many men so many minds* quot homines tot sententiæ. *Adag.*

And so is the Noun Substantive *Man* or *Men*; as *who speaks* quis loquitur? *Ter.* *Blessed are the merciful* beati misericordes. *Mat.* 5.

Many

Many other Substantives are understood in particular Adjectives; as December; i. e. Mensis: a quartan quartana; i. e. febris. *Juven.*

The Nominatives of the three *Persons* are frequently neglected in Latin; as *sayest thou* ais? *I say* aio. *Ter.* The third only when it relates to a Substantive afore; as *if you shall say, I burn, he* [the flatterer] *sweats* si dixeris, æstuo, sudat. *Juven.*

But the first and second person are used for distinction or Emphasis; as *I am a Gentleman* ego Cecropides. *Juven. You are that Maximus* tu Maximus ille es. *Virg.*

The word *thing* being left out, its Adjective is put in the Neuter Gender, and made a Substantive; as *bitter things are wholesome* amara salubria. *Cæsar was all* omnia Cæsar erat. *Luc.*

Any Indeclinable; viz. *Infinitive, Adverb* or *Clause* may be in the place of a Substantive; as *to get thus far is something* Est quiddam prodire tenus. *Hor. a clear morning* clarum mane. *Pers. Is not,* Arma, virum *fomie* Arma virum, nonne hoc spumosum? *Pers.*

Many Substantives singular with a Copulative between them may have a Verb or Adjective plural; as *Majesty and love consist not well together* non bene conveniunt majestas & amor. *Ovid.*

If the Substantive be of different Genders or Persons, the Plural agrees with the Masculine Gender and first Person, afore any other; and with the second rather than the third; as *if you & Tullia are well, I & Cicero are well* si tu & Tullia valetis, ego & Cicero valemus *Cic. the father and mother are dead* pater & mater mortui. *Ter.*

But in things without life, the Neuter Gender is used; as *labour and pleasure, most disagreeing* labor & voluptas, dissimilia. *Liv.*

Singulars of one Gender have often a Plural Adjective of the same; as *Grammar and Musick anciently were taught together* Grammatice quondam & Musice junctæ fuerunt. *Quint.*

Many times the construction is made with the last; as *I and my* [*Sa*
Cicero desire ego & Cicero meus flagitat. *Cic. You, you I say, and the wh*
Senate resisted vos, vos, inquam, & frequens Senatus restitit. *Cic. Kum*
and trouble is to be endured odia & molestia perferenda est. *Cic.*

An Adjective or Verb between two Substantiv
may agree with either of them; as *Semiramis w*
thought a Boy Semiramis puer credita est. *Justin.* b
best with the nearest; as *poverty seemed a burden* pa
pertas onus visum est. *Ter. The whole nation were*
be called Veneti gens universa Veneti appellandi. *Li*

The Relative here, as in the rules afore, is to be consider'd as an A
jective; as *a place that is called Tullianum* locus quod Tullianum appel
tur. Sal.

The Adjective sometimes agrees with a *Primiti*
included in the *Possessive*; as *it is my physick, who a*
sick medicina mea est, qui ægroto.

The English genitives *of mine, of thine, of ours,*
yours, of his, of hers, of their own coming after th
Substantive are to be Latined by *meus, tuus, su*
noster, vester; and made to agree with it; as *a neighb*
of thine proximus tuus. 1. *Sam.* 15. 28.

Here properly is placed the Agreement; made by the Conjunction b
tween Nouns, and between Verbs.

The following Particles couple like *Cases* and *Mood*
viz. *and* et, atque, ac; *or* vel, aut, an; *nor* nec, neque; *b*
except nisi, præterquam; *so—as* ita-ut; tam-quàm-cum
tum; *then* quàm: as *a King or no body* Cæsar aut nu
lus; *the Dog drinks and is gon* canis bibit & fugit. *Ad*
I am as great a friend as who is most tam sum amic
quàm qui maximè. *Cic. A triumph more glorious th*
pleasing triumphus clarior quàm gratior. *Liv.*

Sometimes the Nouns cannot agree in *Case*; a
a thing slight and nought res frivola & nauci.

GOVERN

GOVERNMENT

The Government of Caſes is to be known in Engliſh by SIGNS or WORDS.

Signs, are diſtinguiſht from words, as being included in the Latin Caſes.

Government by Signes.

The Signs *of, to, for, with, by, at, from, in, on, over, then, forth*; beſides the caſes (*pag.* 7) require ofttimes others.

Many of theſe Signs are uſed one for another with Caſes according.

Of

A *Genitive*: The Sign [*of*] betwixt two Nouns puts the latter in the Genitive caſe; as *the fear of the Lord is the beginning of wiſdom* timor Domini initium ſapientiæ. *Pſ.* 111. *The nature of men is deſirous of news* Eſt natura hominum novitatis avida. *Plin.*

[*his*] for [*of*] coming betwixt two Subſtantives notes the foregoing to be a Genitive; as *Æneas his ſon* Æneæ filius.

More uſually ['*s* for *his*] as *Friendſhip is virtue's not vice's companion* virtutis amicitia non vitii comes eſt. *Cic.*

[*Of*] likewiſe after the Verb *admoniſh* notes a Genitive; as *to admoniſh of a debt* æris alieni admonere. *Cic.*

A *Dative*: [*of*] for [*by*] requires a Dative of the *Doer*, after words ſignifying *Paſſively*; as *bewaild of none more than thee* nulli flebilior quàm tibi. *Hor.*

An *Ablative* of the *part, manner, cauſe*; after words of *paſſive* ſignification; as *lame, weak of limbs* membris mancus, debilis. *Cic. Clowniſh of behaviour* motu agreſtis. *Cic. To be glad of war* gaudere bello. *Cic.*

Alſo after ſuch words *born, bare, eaſe, free, deprive, rid, ſpoil, rob, releaſe*; as *born of a noble anceſtry* nobili

genere natus. *Cic.* *bare of money* nummis nudus. *Hor.* *to be eased of a burden* levari onere. *Cic.* *to be freed of fear* liberari metu. *Cic.*

A *Genitive* or *Ablative*: afore Nouns of *praise*, or *dispraise*; as *a youth of great hope*, *of eminent virtue* adolescens eximiâ spe, summæ virtutis. *Cic.*

Usually after the Verb [*am*]; as *be of good cheer* bono animo es. *Ter.* *the Boy seems of a dull capacity* dull puer ingenii videtur. *Mart.*

Likewise after such words *accuse*, *acquit*, *full*, *empty*, *need*, *weary* &c; as *to accuse of covetousness* avaritiæ insimulare, *Cic.* *Of false crimes* falsis criminibus. *Ovid.* *To acquit of naughtiness* improbitatis absolvere. *Cic.* *Of an accusation* crimine. *Hor.* *Full of hope* plenus spei. *Cic.* *Of expectation* expectatione. *Cic.* *To want counsil* egere consilii *or* consilio. *Cic.* *weary of war* fessus bello. *Cic.* *Of affairs* rerum. *Virg.*

Particular words; as *worthy*, *unworthy*, *sick*, *sparing*; as *Pompey worthy of the Generalship* Pompeius dignus Imperii. *Cic.* *A Servant worthy of his Master* dignus Domino Servus. *Plaut.* *A doubt unworthy of a man* indigna homine dubitatio. *Cic.* *Not unworthy of great Ancestors* magnorum haudquaquàm indignus avorum. *Virg.* *Sick of a disease* æger morbo. *Cic.* Morbi. *Val. Max.* *Sparing of blood* parcus sanguinis. *Tacit.* *Of retinue* comitatu. *Plin.* *Of labor* operâ. *Plant.*

After some words of *want* or *need*, only an Ablative; as opus, usus: *There is need of courage* or *valour* nunc animis opus, *or* viribus usus. *Virg.*

To

A *Dative*: *You speak to a stone* lapidi loqueris. *Adag.* *To look to him self* sibi prospicere, providere, consulere, cavere *&c.* *Cic.*

A *Genitive* or *Dative*: afore *proper*, *common*; as *proper to an Orator* proprium eſt oratoris: *to Conſuls* conſulibus. *Cic. It is common to all arts* commune eſt artium omnium. *Cic. Fortune is common to all* fortuna communis eſt omnibus. *Cic.*

[*to*] for [*of*] after Nouns of *Relation*; i.e. *friend, enemy, father, ſtepdame*, &c. as *a friend to the Emperor* amicus Imperatoris. *Tacit. To the Muſes* Muſis. *Hor. An enemy to counſil* inimicus conſilii. *Tacit. To the Empire* Imperio. *Cic. Father to the Country* Pater patriæ. *Cic. To the City* Urbi pater. *Cic. A Stepdame to the Son* Noverca filii. *To thee* tibi. *Cic.*

To after the word alienus [*ſtrange*] notes three Caſes Gen. Dat. Abl. *as ſtrange or unagreeable to my dignity* alienum dignitatis meæ *Cic. to Oratory* arti Oratoriæ. *Quint. to Majeſty* Majeſtate. *Cic.*

For

A *Dative*: as *I have for him, not for you* habeo huic, non tibi. *Ter.*

[*for*] inſtead of [*to*]; as *profitable for* (or *to*) *me, inconvenient for Cæſar* mihi utile, Cæſari inutile. *Cic.*

An *Ablative of the cauſe*: as *to tremble for fear* trepidare metu. *Virg. For example* exempli *or* verbi gratiâ, causâ. *Cic. I requeſt for friendſhip-ſake* nomine amicitiæ peto. *Cic.*

A *Genitive* or *Ablative* after *condemn*; as *to condemn for wickedneſs* ſceleris condemnare. *Cic. for a crime* crimine. *Cic.*

Afore Nouns of *price*: *viz.* a Gen. afore an Adjective alone; as *for ſo much, how much, more, leſs*, &c. chiefly with the Verbs of *buying, ſelling*; as *I ſell not for more, perhaps for leſs* non vendo pluris, fortaſſe etiam minoris. *Cic.*

An

An *Ablative* afore a Subſtantive; as *I bought an enemy, ſold a friend for a talent* talento inimicum emi, amicum vendidi. *Plaut.* Alſo afore theſe Adjectives *much, very much, little, half, very little*; as vendere magno, plurimo, quàm plurimo, dimidio. *Cic.* parvo emere. *Hor.* minimo. *Ter.* Vili. *Mart.* *to get for nothing* nihilo conſequi. *Cic.*

With

An *Ablative of the inſtrument, manner*, or *cauſe*; as *to kill with a Sword* confícere gladio. *Cic.* *Tis done with ſpeed* celeritate geſtum eſt. *Cic.* *I burn with love* ardeo amore. *Ter.*

A *Dative* after *to be angry*; as *to be angry with or at men* hominibus iraſci *or* ſuccenſere. *Cic.*

By

An *Ablative of the inſtrument, manner, means*, or *place*; as *to dye by his own hand* manu ſuâ cadere. *Tacit.* *You are a Father by nature, I by counſil* tu naturâ pater, ego conſiliis. *Ter.* *by right or by wrong* jure vel injuriâ. *Ter.* *lying in wait by Sea or Land* inſidiæ terrâ marique factæ. *Cic.*

Alſo an Ablative of *meaſure* or *exceſs*; as *higher by ten foot* altior denis pedibus. *Curt.*

A Dative of the *Doer* after words of paſſive ſignification; as *good things are deſired by good men* honeſtis bonis viris petuntur. *Cic.*

[*by*] is frequently rendered by an Adverb in [*im*]; as *by degrees* gradatim.

At

An *Ablative* chiefly of *time, manner, game, rate*; as *at bed-time* concubiâ nocte, *at firſt coming* primo ſtatim

tim adventu or acceſſu. *Liv. at a word* uno verbo. *Plaut. To play at Ball* pilâ ludere. *Cic. to live at a great rate* ſumptu profuſo vivere. *Quint.*

From

A *Dative* after *taking*, *diſagreeing* and the like; as *time takes away ſorrow from men* Dies adimit ægritudinem hominibus. *Ter. Let not the life differ from the profeſſion* ne orationi vita diſſentiat. *Sen.*

An *Accuſative* or *Dative* after *conceal*; as *I hid or conceald not the ſaying from you* non te celavi ſermonem. *Cic. Let this be kept from my Father* hoc celetur Patri. *Ter.*

A *Genitive* or *Ablative* after the Adjective *free*; as *free from labor* laborum liber. *Horat. free from war* immunis belli. *Virg. A mind free from care* liber animus curâ. *Cic. from war* immunis militiâ. *Liv.*

In

An *Ablative*: of *time*, *manner*, *price* and ſometimes *place*; as *come in the night* nocte veni. *Mart. in truth* re quidem verâ. *Cic. To have in great eſteem* præcipuo honore habere. *Cæſar. It ſtood in a hundred talents* centum talentis ſtetit. *Liv. In place of a brother* fratris loco. *Ter.*

A *Genitive* rarely; as *to take in good part* æqui bonique facere. *Ter.* boni conſulere. *Sen. skil'd i'th Law* juris peritus; *and alſo* jure. *Cic.*

On or Upon

An *Ablative* of *time*, *inſtrument*, or *condition*; as *upon the day appointed* ſtato die. *Plin. to learn* or *play on the fiddle* fidibus diſcere *or* canere. *Cic. on this condition* eâ lege *or* conditione. *Cic.*

Like-

Likewiſe after to *lean* or *rely*; as *to lean on a ſpear* niti haſtâ. *Virg. to rely upon authority* autoritate niti. *Cic.*

An *Ablative* or *Accuſative* after *feed*; as *to feed on fleſh* carne veſci. *Cic. to live upon gain* quæſtu paſci. *Cic. to feed upon the weaker ſort* infirmiſſimos veſci. *Tacit. to feed on the brambles* paſci dumos. *Virg.*

Over

A *Dative* after Verbs of *Dominion*; as *to be* or *to rule over the common-wealth* dominari, imperare reipublicæ. *Cic.*

An *Ablative* after *wander*; as *to wander over all Aſia* or *the whole City* totâ Aſiâ *or* Urbe vagari. *Cic.*

Then

An *Ablative* after a Noun of the *Comparative degree*; as *the Coat is nearer then the Cloak* tunica pallio propior. *Ter.*

Worth

A *Genitive* or *Ablative* after *eſteem, hold, value*, &c. The ſign *worth* puts a Subſtantive of the *price* in the Ablative caſe; as *to eſteem worth three pence* tribus denariis æſtimare. *Cic.*

But it uſually puts an Adjective without a Subſtantive in the Genitive caſe; as *ſome things are eſteemed worth more, others worth leſs* alia pluris æſtimantur, alia minoris. *Cic.* Likewiſe the Subſtantive *nought* flocci, nauci, pili, aſſis, teruncii; as *to hold worth nought* nauci habere. *Cic.* flocci, teruncii facere. *Plaut.* aſſis, pili. *Catul.*

Some words are uſed in both caſes; as *I am worth nothing* nihili ego ſum. *Cic. I think it worth ſomething*

non-

nonnihilo æſtimo. *Cic.* *worth much* magni *or* magno æſtimo. *Cic.*

Theſe caſes are to be uſed with the aforeſaid Verbs when the ſign *worth* is underſtood; as *I value it not this* non hujus facio. *Ter.* *to eſteem virtue much* magno virtutem æſtimare. *Cic.*

The ſigns *at*, *in*, *to*, *from*, *by*, afore a proper name of Town or City note the caſes following.

At or *in* notes a Genitive; as *She dwelt at Rhodes* Rhodi habitabat. *Ter.* a *Dative* or *Ablative* of a noun, plural or of the third Declenſion; as *to be at Athens* Athenis eſſe; *at Tibur* Tiburi; *at Babylon* Babylone. *Cic.*

To notes an Accuſative: *from*, *by*, an Ablative; as *I haſtned from Larinum to Rome* Larino Romam advolavi, *I took my journey by Laodicea* iter Laodiceâ faciebam. *Cic.*

The ſame ſigns afore *home*, *Country*, &c. note the ſame caſes; as *I'le be at home* ego domi ero. *Ter.*

Alſo belli, militiæ, foci, joyned with domi; as *we were together at home and in the war* domi & militiæ, domi bellique, una fuimus. *Cic.* *at home and at the fire ſide* domi focique. *Ter.* *to be in the Country* ruri eſſe. *Cic.* *a little corn at the farm* rure far modicum. *Perſ.* *I go to the Country* ego rus eo. *Ter.* *to go from home* cedere domo. *Hor.* *to come from the country* venire rure. *Ter.*

The ſign *to* afore *home* is omitted, unleſs a Poſſeſſive adhere to it; as *go home* abi domum. *Ter.* *you forc'd Pompey to his home or houſe* Pompeium domum ſuam compuliſtis. *Cic.*

Likewiſe

Likewiſe other Nouns, as *to dwell in the neighborhood* proximæ viciniæ habitare. *Plaut.* *to lye on the ground* terræ procumbere. *Ovid.* *lay'd along on the ground* fuſus humi. *Virg.* *to come to a cave* ſpeluncam devenire. *Virg.* *to go from a place, city or country* cedere loco, urbe, patriâ. *Cic.* *let him riſe firſt from, and go laſt to bed* primus cubitu ſurgat, poſtremus cubitum eat. *Cat.* *to return from catering* obſonatu redire. *Plaut.*

In other places of Conſtruction the *Signs* are to be rendred by Latin Particles, as hereafter is taught.

Nevertheleſs theſe *Engliſh ſigns* ofttimes in making Latin are not to be conſidered:

1. Between a Verb ſignifying tranſitively and it's caſe; as *to admit of a thing* rem admittere; *to ſeek, follow, hunt after a thing* quærere, proſequi, venari aliquid.

2. Between Nouns; as *the middle of the world* medius mundus. *Cic.* *the height of winter* ſumma hyems. *Cic.* *the bottom of the heart* imum cor. *Virg.* *the reſt of Græce* or *of the day* reliqua Græcia *or* dies. *Cic.*

2 GOVERNMENT by WORDS:

1. By words Declinable, 2. By words Indeclinable or Particles.

Government by Declinables.

An Accuſative.

Verbs ſignifying tranſitively always Govern an Accuſative caſe; as *flattery gains friends, truth ill will* obſequium amicos, veritas odium parit. *Ter.* *I am here whom you ſeek* quem quæritis adſum. *Virg.*

Though ſome Verbs of an Active ſignification commonly require another caſe; yet they alſo in ancient Authors have an Accuſative; as *to uſe my goods* uti mea bona *Plaut.* *to loſe labor* abuti operam. *Ter.* *to diſcharge*

as

an office fungi officium. *Ter.* fungi munera. *Tac.* *to gain profit* potiri commodum. *Ter.* *to get nothing but mischief* nihil nisi malum frui. *Plaut.* *he will hurt the man* nocturus est hominem. *Plaut.*

Verbs to *ask*, *teach* or *unteach* may have two Accusatives, *i.e.* of the *Person* and *thing*; as *to ask the Governour money* nummos magistratum poscere. *Cic.* *why should I teach thee letters* cur te literas doceo. *Cic.*

Other Verbs, as *to make*, *appoint*, *&c.* may also have two Accusatives; as *I make thee a God* facio te Deum. *Ter.*

Verbs signifying intransitively admit an Accusative of their own or alike signification; as *to live a life* vitam vivere. *Cic.* *to fight battles* pugnare prælia. *Horat.* Not regarding the signs; as *to smell of pomanders* olere pastillos. *Horat.* *to sup upon birds* cænare aves. *Horat.*

Such Adjectives; as *this*, *it*, *that*, *what*, *one*, *some*, *many*, *more*, *much*, &c. being Neuter Accusatives, consist also with the Accusative of the Verb (or with other Cases); as *I advise you this* id te moneo. *Ter.* *you counsel me this* id mihi authores estis. *Ter.* *we are forewarn'd many things by the Sacrifice* multa extis admonemur. *Cic.* Some others; as *they live most part upon milk* maximam partem lacte vivunt. *Cæs.* *to write such other things* alia id genus scribere. *Cic.*

The Verb Passive governs the same remote case as its Active v.g. *Cato is ask't his judgment* Cato rogatur scientiam. *Cic.* *taught pleasant tunes* dulces docta modos. *Horat.*

Many English words are to be Latined in other cases, specially a Dative, by virtue of the *Signs*; which though they are not expresst, yet may easily be applied.

A Dative

Words, that may have the ſign *to* or *for* after them, govern a Dative caſe; as *that he might do you a good turn, he firſt did you a bad one* tibi ut beneficium daret, priùs injuriam fecit. *Cic.*

Here note: the Noun wanting the ſign is placed next the Verb; otherwiſe it comes after the Accuſative; as *that he might do a good turn for you*, &c.

Of this kind are Verbs of telling; as *tell me, O Muſe, the man* dic mihi, Muſa, virum. *Horat.*

Such are; *to perſwade, promiſe, deny, bid, flatter, revile, threaten, anſwer, welcome*; as *what he denied him upon requeſt, he freely after promiſed him* id quod antea petenti denegâſſet, illi ultrò pollicebatur. *Cic. to bid fortune be gone* fortunæ laqueum mandare. *Juv. the benefit anſwers not the pains* fructus non reſpondet labori. *Ovid.*

Alſo Verbs of *giving*; as *give us eaſe* otia da nobis. *Mart.*

Such are; *reſtore, bring, deliver, ſend, grant, pardon*; likewiſe *to wiſh, ſpare, ſhew, buy, ſell, owe, pay, I bring you or deliver you letters* literas tibi fero. *Plaut. I pardon you* tibi condono, remitto. *Cic. they that wiſh their Country well, ſpare not their life* qui patriæ conſulunt, vitæ non parcunt. *to ſhew a wanderer the way* viam erranti monſtrare. *Cic. I ſell you your own farm* rus tibi vendo tuum. *Mart.*

Moreover words ſignifying *profit, diſprofit, pleaſure, diſpleaſure, truſt, diſtruſt, help, favour, befall, command, obey, ſerve, diſobey, reſiſt, oppoſe, withſtand*; as *the ſhade hurts the fruit* nocent umbræ frugibus. *Virg. men truſt their eyes more then ears* homines amplius oculis quam auribus credunt. *Sen. like favour the like* ſimilia ſimi-

libus

libus favent. *Adag. a wise man overrules the stars* sapiens dominatur astris. *Adag. to obey God is liberty* Deo parere libertas est. *Sen. to resist love* pugnare amori. *Virg.*

Certain Verbs of the aforesaid significations require an Accusative only; as juvo, jubeo, lædo.

The Verb [*have*] latined by [est *is*] turns the English Nominative into the Dative, and the Accusative into a Nominative; as *I have a father* est mihi pater. *Virg.*

The Verb [*am*] admits two Datives, to be known by the sign *to* afore the *Person*, *for* (expreſt or understood) afore the *thing*; as *eloquence is an ornament* (or *for an ornament*) *to Princes* eloquentia principibus ornamento est. *Cic.*

These also; *to esteem, count* or *reckon, hold, take, think, impute* with their Accusative admit two Datives; as *Socrates esteemed the punishment a great honour* pœnam sibi honori summo æstimavit Socrates. *Quint. you count it a praise to you* tu tibi id laudi ducis. *Ter. who imputes this as a fault* or *folly to you* quis hoc tibi vitio vertit *or* stultitiæ? *Plaut.* tibi crimini dedit. *Cic. he has me for a copy* habet meipsum sibi documento *or* exemplo. *Cic.*

A Genitive

When two English Substantives of divers significations come immediately together, the former is to be Latined in the Genitive case; as *prayer-time* hora precum; *Sunday* dies solis; *a Goldsmith* auri faber. Sometimes both may be Latined by a single word; especially *man* being one of the Nouns; as *a horseman* eques.

The

The latter Subſtantive after the ſign ['s] being a Noun of *relation* is oft omitted; as *Hector's Andromache* Hectoris Andromache; i.e. *wife* uxor. *Virg. I ſee his Byrrhia* video hujus Byrrhiam, i.e. *ſervum* ſervum. *Ter. I am Pompey's* Pompeii ſum (i.e. ſocius) *Cic. Thais is wholly my brother's* Thais fratris tota eſt *Ter.*

There is oft underſtood in the *Poſſeſſive* a Genitive of the *Primitive*, with which an Adjective agrees; as *my fault only* meum ſolius peccatum. *Cic. you ſaw my weeping eyes* noſtros vidiſti flentis ocellos. *Ovid.* Sometimes a Subſtantive agrees with that Genitive underſtood; *viz. it was my act as Conſul* meum conſulis factum. *Liv.*

An Adjective being made Neuter, puts the Subſtantive in the Genitive caſe; as *this letter* hoc literarum. *Cic. that age* id ætatis. *Cic. as much credit as money* quantum nummorum tantum & fidei. *Juven. bitter cares* amara curarum. *Horat. narrow paſſages* anguſta viarum. *Virg.*

An Ablative

Theſe particulars govern an Ablative caſe; as *to uſe* utor, *to perform* fungor, *to enjoy* fruor, with their Compounds; as *to uſe or abuſe patience* uti vel abuti patientiâ. *Cic. to perform an office* fungi vel perfungi munere. *Cic. to enjoy eaſe* otio frui, perfrui. *Cic.*

The Ablative Abſolute: Two Engliſh Nominatives, whereof one is uſually a Participle, ſtanding by themſelves *i.e.* neither agreeing with the Verb, nor govern'd by any word in the clauſe, are to be Latined in the Ablative caſe; as *the tribune neither bidding, nor forbidding* non cogente quidem, ſed nec pro-

rohibente Tribuno. *Juven.* Commonly *being* comes between; as *I being leader, keep you the way* me duce, carpe viam. *Ovid.*

The Participle ſtanding by it ſelf agrees with the clauſe; as *it being heard that the Caſtle was beſieged* audito Caſtellum obſideri. *Tacit.*

Various CASES after certain WORDS:

An *Accuſative* or *Genitive*:

Verbs *to remember* or *forget*; as *I remember the triumphs* recordor triumphos. *Cic. the kindneſs* meriti. *Cic. to remember things once heard* ſemel audita meminiſſe. *Cic. the day* diei. *Ter. forget the Greeks* obliviſcere Graios. *Virg. I have forgot my ſelf* oblitus ſum mei. *Cic.*

An *Accuſative* or *Dative*:

1. *Near*; as *near the City* propior urbem. *Cic. near death* propior funeri. *Horat. I ſat next Pompey* proximus Pompeium ſedebam. *Cic. I am nearer my ſelf* proximus ſum egomet mihi. *Ter.*

2. *To heal*; as *to heal the matter* rem mederi. *Ter. the wound* vulneri. *Cic.*

3. *To reward*; as *he rewarded me richly* me opiparè muneratus eſt. *Cic. to reward the deſerving* bene merenti munerari. *Plaut.*

A *Genitive* or *Dative*:

1. *Like* or *unlike*; as *you are like the Maſter* Domini ſimilis es. *Ter. a ſon like the father* patri ſimilis filius. *Cic. unlike himſelf* diſſimilis ſui; *his neighbor* proximo. *Cic.*

2. *To pity* miſereor, miſereſco; as *pity the poor* miſere inopum. *Juven. pity the King* miſereſcite Regis. *Vi* ſometimes a Dative; as *to pity theſe men* his mi reſcere. *Statius. As the Father pitieth his Children, ſo t Lord pitieth them that fear him* quomodo Pater mi retur filiorum, miſertus eſt Dominus timentibus *Pſalm* 103. 13.

A *Genitive* or *Ablative*:

1. Verbs of *Coſt* govern a Genitive of the Adjecti alone; as *nothing coſts a father leſs then his ſon* nulla minoris conſtabit patri quam filius. *Juven. w coſt it* quanti ſtetit? *Quint.* An *Ablative* of t Subſtantive; as *it coſt blood* ſanguine ſtetit. *Li an hundred talents* centum talentis. *Liv.*

2. The Verb *to obtain* potior, *treaſure* gazâ; *a kin dom* regni. *Cic.*

NOUNS of certain SIGNIFICATIO will have certain Caſes.

Nouns of *Space i. e. Time* or *Meaſure* are uſed various Caſes.

A Noun of *time* anſwering to the queſtion [*when*] uſual y put in the Ablative caſe; as *every fryday* [*th leſſon*] *Hannibal is heard* ſextâ quâque die ca Hannibal implet. *Juven.* To the queſtion [*h long*] in the Accuſative; as *they ſhall reign three hu dred years* tercentum regnabitur annos. *Vi* Sometimes in the Ablative; as *Maſiniſſa reig ſixty years* Maſiniſſa regnavit ſexaginta annis. *Pl* With the Particle *ago* or *ſince* abhinc, an Accu tive or Ablative; as *he dyed two and twenty ye*

ago, abhinc duos & viginti annos mortuus eſt : *fifteen years ſince* abhinc annis quindecim. *Cic.*

A Noun of *meaſure* is uſed in the Accuſative, Genitive or Ablative ; as *we muſt not ſwerve from a good conſcience the breadth of a nail* a rectâ conſcientiâ tranſverſum unguem non oportet diſcedere. *Cic. to be a days journey off* abeſſe iter unius diei. *Cic. a court ten foot wide* area lata pedum denûm. *Col. boards raiſed ſeven foot* aſſeres ſeptem pedibus elati. *Col.*

A Noun of the *Part* is uſually put in the Ablative Caſe ; as *a red hair'd man* or *of red hair* crine ruber. *Mart.* ſometimes crine rubro.

Where note, 1. the Adjective [*hair'd*] implying the *Part* is latin'd by the Subſtantive of the *Part*. 2. the Adjective [*red*] joyn'd to the Noun of the *Part* agrees with the Subſtantive of the *Whole* or *Part*.

It is alſo put in a Genitive, after a Word, ſignifying *Paſſively* ; as *to vex himſelf*, or *to be vext at heart* angere ſe, *or* diſcruciari animi. *Ter.* Oftner in an Accuſative after the like words (eſpecially among the Poets) as *having her hair torn* laniata comas. *Ovid.*

The GOVERNMENT of the IMPERSONAL.

Impersonals govern a Dative caſe ; as *Jupiter is not at leiſure* non vacat Jovi. *Ovid. it becomes us* decet nobis. *Ter.*

The Impersonal admits an Accuſative by reaſon of an Infinitive following or underſtood ; as *it becomes*

comes an orator not to be, but to seem, in a passion oratorem irasci minimè decet, simulare non dedecet. *Cic.*

The *Infinitive* after the Verb *ought, should, must, need,* may be rendred by a Participle Passive; either.

1. by the perfect & oportuit, for the *thing past*; as *it ought to have been told* communicatum oportuit: *she should have been kill'd* interemptam oportuit. *Ter.*

But if *opus est, usus est* are put for *oportet* [in any tense,] the Participle must be in the Ablative; as *I should have made hast* properato opus erat. *Sen. that's sooner don, which ought not, then that which ought, to be don* citiùs quod non facto est usus, fit, quam quod facto est opus. *Plaut.*

2. by the future & est with a Dative, for the *thing to come*; as *I must be gon* migrandum est mihi. *Mart.*

These Impersonals *it irks* piget, *shames* pudet, *repents* pænitet, *wearies* tædet, *pities* miseret, miserescit, (which in English are oftner Verbs Personals) will have an Accusative with a Genitive, known by the Sign *of* or *for*; as *it repents me not, or I repent not, of my counsel* non me consilii mei pænitet. *I am ashamed, Crassus, for you* pudet me tui, Crasse. *Cic.*

The Impersonal *it concerns*, latin'd by est, interest, refert, requires a Genitive; as *it concerns a youth to honor his betters* adolescentis est majores revereri. *Cic. it concerns the common-weal* interest communis salutis. *Cic.*

The Pronouns Primitive *me, thee* &c. with the Verbs interest, refert, are render'd by these Ablatives Possessive meâ, tuâ, nostrâ, vestrâ, suâ, cujâ; as *what's that to me* quid meâ refert. *Ter.*

Also with such genitives, magni, parvi, tanti, quanti; as *it much concerns me* magni meâ interest. *Cic.* The Substantive *re* or *causâ* seems here to be understood.

The

The CONSTRUCTION of the INFINITIVE.

A Verb coming after another in the ſame clauſe is of the Infinitive mood, uſually known by the ſign *to*; as *love bad me write, what I was aſhamed to utter* dicere quæ puduit, ſcribere juſſit amor. *Ovid. I bad you give her to drink* juſſi ei dare bibere. *Ter.*

The Infinitive follows ſome Adjectives; as *daring to endure* audax perpeti. *Horat. worthy to be loved* dignus amari. *Virg.*

Uſually the Infinitive has an Accuſative afore it; as *I wiſh you well* jubeo te ſalvere. *Ter.*

The Infinitive *to be* has the ſame caſe after it as afore it; as *Ajax made himſelf to be Jupiters nephew* retulit Ajax eſſe Jovis pronepos. *Ovid. I would be kind* cupio me eſſe clementem. *Cic. Nature would have all men be happy* natura beatis omnibus eſſe dedit. *Claud.*

But when this Infinitive *to be* has a Dative of the Verb afore it, it may have an Accuſative after it; as *it concerns you to be honeſt* vobis expedit eſſe bonas. *Ter.*

If the Engliſh Infinitive admits [*that*] for its ſign [*to*]; [*that*] may be latin'd by [*ut* or *quòd*], and the Infinitive made the Subjunctive mood; as *he commands them to give their opinion* jubet ſententiam ut dicant ſuam. *Plaut.* Contrariwiſe [*that*] render'd [*to*] makes an Infinitive; as *I charge you that you do it* volo te id facere. *Ter.*

The Engliſh Infinitive after certain words may be latin'd by a Gerund, Supine, Subſtantive, or Participle.

By a *Gerund*

1. In *di* after a Noun that governs a Genitive, as *I have a deſire to ſee* efferor ſtudio videndi. *Cic. ignorant to do* inſcius faciendi. *Cic. not uſed to ſail* inſuetus navigandi. *Cic.*

2. In *do*: after a word that governs a Dative, as *they endeavored to cleanſe* eluendo operam dederunt. *Plaut. I am not able to pay* non ſum ſolvendo i. e. par. *Cic.*

3. In *dum*; with [*ad*] for the ſign [*to*] after a Noun of the *inſtrument, place*, or *matter*; as *weapons to defend, or hurt* arma alia ad tegendum, alia ad nocendum. *Cic. a place to plead in* locus ad agendum. *Cic. matter to write* materia ad ſcribendum. *Quint.*

Likewiſe after ſuch words *avail, belong, fit, ready, ſlow* &c. as *all things conduce to live well* omnia ad beatè vivendum ferunt; valent. *Cic. ſlow to believe* ſegnis ad credendum. *Liv. apt to jeſt* promptus ad jocandum. *Cic.*

The Infinitive being made a Gerund in *di*, ſometimes may have alſo a genitive plural of the noun it ſhould govern; as *leave to take away* facultatis diripiendi pomorum. *Suet.*

By a *Supine*

1. In *um*; the Active or Neuter Infinitive may be made the firſt Supine after a Verb that implies motion to; as *you go to deſtroy* is perditum. *Ter. challenge to ſing* provoco cantatum. *Ter. I was not hired to be beaten* non vapulatum conductus ſum. *Plaut.*

2. In *u*; the Paſſive Infinitive may be the ſecond Supine, after ſuch Adjectives *eaſie, hard, worthy, fair, filthy, ſtrange* &c. as *do whatever is beſt*

beſt to be don quod optimum factu videtur, facies. *Cic.* *O filthy, not only to be ſeen, but heard* ô rem, non modo viſu fœdam, ſed etiam auditu. *Cic.*

The Infinitive, after ſuch Nouns, may become a Subjunctive with the Relative; as *worthy to be laved* dignus qui ametur. *Cic.* *not fit to be ſent* non idoneus qui mittatur. *Cic.*

Here likewiſe the Engliſh *Active* is uſed for the *Paſſive*; as *fit, or unfit to ſay or to be ſaid* fas, or nefas dictu. *Cic.*

By a *Subſtantive*:

As *I challenge to fight* provoco ad pugnam. *Cic.*

By a *Participle*:

After the Verb *am*; The Active Infinitive is made by the Future in *-rus*; as *'tis uncertain, what is to come* quid caſurum ſit, incertum eſt. *Cic.* The Paſſive Infinitive by the Future in *-dus*; as *death is not to be fear'd* mors non eſt pertimeſcenda. *Cic.*

The like Infinitives are made the ſame Participles after a Subſtantive; as *ſhe fetcht water to waſh* lavaturas manè petebat aquas. *Ovid.* *to ſet out marbles to be cut* locare marmora ſecanda. *Horat.*

The CONSTRUCTION of the PARTICIPLE.

A Participle uſed for a Noun that may have the ſign [*of*] after it admits a Genitive; as *deſiring glory* appetens gloriæ. *Cic.* *fearing or afraid of the rod* metuens virgæ (jam grandis Achilles) *Juven.*

The Participle in (*-ing*)

With (*a*) or (*the*) or an Adjective afore it, is made a Subſtantive; as *a writing* ſcriptura. *pleaſant walking* jucunda deambulatio: Or an Infinitive for a Subſtantive; as *playing the fool ſometimes is pleaſant* dulce eſt deſipere in loco. *Hor.*

After a Verb of *motion*, it is oftner the firſt Supine; as *to go a hunting* ire venatum. *Virg.* Not ſo well an Infinitive; as *I go a viſiting* eo viſere. *Ter.*

After ſuch Verbs *leave, give over,* it is beſt made an Infinitive; as *leave admiring* deſine mirari. *Cic.*

A Noun, with the ſign (*of*) may make the Participle either the *Gerund* in (*di*) or a Subſtantive; as *an end of mourning* finis plorandi, *or* ploratûs. *Cic.*

Commonly the Participle is to be made a *Gerund* [in *do*] when the Particle afore it requires an Ablative; [in *dum*] when an Accuſative; as *anger is to be refraind in puniſhing* cohibenda eſt ira in puniendo. *Cic.* *'tis a crime to take a bribe for judging* [*a cauſe*] flagitioſum eſt ob judicandum accipere munus. *Cic.*

But when the Participle implies the *cauſe* or *manner of doing*, the *Gerund* (in *do*) is oftner without the Particle; as *I am not weary of doing* ego ſum indefeſſus agendo. *Ovid.* *Virtue may be derived by teaching* virtus tradi poteſt inſtituendo. *Cic.*

The Participle in *-ing* oftentimes may be better made by the Subjunctive mood after theſe Particles *of, for, from,* when they ſignifie *that* quòd, *that not, leſt that* ne *or* quo minùs; as *he was angry with me for defending him* or *that I defended him* mihi, quod defendiſſem, ſuccenſuit. *Cic.* *have a care of doing ill* or *leſt you do ill* cave ne ſcelus facias. *Cic.*

The Participle [*having*] afore a Verb, if it be not latin'd by a Deponent Participle, makes it in the Preter tenſe with an Adverb (cùm, poſtquàm *&c.*); as *having come to Afric* cum in Africam veniſſem. *Cic.* *It having been told me* poſtquàm mihi

renuntiatum eſt. *Cic.* Or elſe is expreſt by an Ablative abſolute; as *having called the People together, he bad all be ready* convocato populo, jubet omnes præſtò eſſe. *Juſtin.*

Obſerve; The GERUND, uſed either for the Infinitive or for the Participle, doth not ſo well govern the Subſtantive; but better, like an Adjective, agrees with it; as *there will be place to pardon* or *for pardoning the fault* dabitur locus ignoſcendi peccati. *Ter. Fit for drinking* or *to drink Helicon* aptus bibendis fontibus Aonidum. *Juv. Friendſhip is gain'd more by giving than receiving gifts* magis dandis quam accipiendis beneficiis amicitia paratur. *Cic. backward to give* or *in giving thanks* ad referendam gratiam tardus *Cic. an age fitter to uſe* or *for uſing theſe things* ætas ad hæc utenda magis idonea. *Ter.*

The RULE of the REDDITIVE.

The Redditive, anſwering the Interrogative in all variety of caſe and tenſe, is therefore placed here; as *what have you deſerved? a gallows*: quid meritus es? crucem. *Ter. in what eſteem is he? very high*: quo honore eſt? ſummo. *Plaut. did not I ſay? you did* annon dixi? dixiſti. *Ter.*

The Poſſeſſives *mine, thine &c.* anſwer not the Genitive [*whoſe*] but its Subſtantive; as *whoſe book is this? mine* cujus eſt hic liber? meus.

But [*whoſe*] rendred by cujus, -a, -um requires a Genitive of the anſwer; as *whoſe cattle? Melibœus's* cujum pecus? Melibœi.

Sometimes a ſpecial rule varies the caſe of the anſwer; as *what coſt it? twenty Pounds.* quanti ſtetit? viginti minis. *Plaut.*

The

GOVERNMENT of INDECLINABLES or PARTICLES.

Many Adverbs of *Quantity* govern a Genitive Caſe; as *eloquence enough, little wiſdom* ſatis eloquentiæ, ſapientiæ parum. *Sal.*

Some of *time* or *place* take a Genitive of the ſame ſignification; as *then* tunc temporis. *Juſtin. where in the world* ubi terrarum, gentium, loci. *Cic. In the mean while* interea loci. *Ter. far away* longè gentium. *Cic. any whither* quovis gentium. *Ter.* alſo *to ſuch* eò; as *to ſuch inſolence* eò inſolentiæ. *Plin.*

Theſe Adverbials, *the day afore* pridie, *the day after* poſtridie, are uſed with a Genitive or Accuſative; as pridie *or* poſtridie ejus diei. *Cic. the day before the wakes* pridie compitalia; *the Nones* Nonas. *Cic. the day after Apollo's games* poſtridie ludos Apollinares; *the Ides* Idus. *Cic.*

Adverbs of Paſſion generally govern a Vocative; as O Melibœe. *Virg.*

Theſe alſo govern the Caſes following; *O joyful day* ô feſtus dies. *Ter. O Impudence* ô audaciam. *Cic. wo* Væ, *Alas* hei; as *O me wretch* væ *or* hei miſero mihi. *Ter.* heu miſero mihi. *Plaut.* heu *or* ah me miſerum. *Ter.*

O the faith of men proh hominum fidem. *Ter.*

O the ſickleneſs vah inconſtantiam. *Ter.*

O the cunning hem aſtutias. *Ter.*

Parti-

Particular Indeclinables with their Caſes.

Method would here, as afore, proceed to ſet the Engliſh Particles firſt but brevity requires the contrary; for the Latin are fewer and more eaſily rank't.

LATIN PARTICLES with an *Accuſative*:

Two and Twenty *Adverbs*: Adverſùs,-ùm; apud, circa, circiter, cis, citra, clanculum, erga, extra, infra, intra, juxta, penes, ponè, prope, propter, ſupra, ſecundùm, ſecus, versùs, ultra, uſque.

Ten *Præpoſitions*: Ad, ante, circùm, contra, inter, ob, per, poſt, præter, trans.

With an *Ablative*:

Six *Adverbs*: abſque, coram, palam, procul, ſine, tenus; which laſt admits alſo a Genitive Plural.

Nine *Præpoſitions*: a, ab, abs, cum, de, e, ex, præ, pro.

With an *Accuſative* or *Ablative*:

Two *Adverbs*: clam, ſubter.

Three *Præpoſitions*: In, ſub, ſuper, according to their ſignification. In, ſub [for *ad*] an Accuſative; elſe uſually an Ablative caſe. Super [for *de*] an Ablative; elſe either Caſe.

The Adverbs *tenus*, *verſus* are ſet after their Caſes. So is the Præpoſition *cum* after theſe Ablatives me, te, ſe, quî, nobis, vobis, quibus.

Here alſo may be added the Adverb *behold* en, ecce with its Caſes N. Ac. [the Verbs *adeſt*, *vide*, being underſtood] as *behold Priam* en Priamus. *Virg.* i.e. adeſt. *behold four Altars* en quatuor aras. *Virg.* i.e. *vide*. Alſo cedò *gi'me*; as *gi'me one* cedò mihi unum. *Cic.*

The

The SIGNIFICATION of PARTICLES, with their reſpective *Caſes*.

Theſe ſignifications, ariſing from the Conſtruction of words in propriety of Speech, are not now all exhibited; but in great part, as by way of *Eſſay*.

The Engliſh Examples throughout the Syntax were placed firſt, to introduce the young beginner to *make* a little latin. Now the Engliſh is purpoſely left out, to lead him on to *conſtrue* a little latin; that by theſe two initiations, he may be prepared more fully to do *both*.

A, ab: *by* or *of*] fas eſt & ab hoſte doceri. *Ovid. from*] oriturur ab ovo. *Hor.* ab urbe conditâ. *Cic. after*] ſtatim a funere. *Sal. on*] ſecuros vos ab hac parte reddemus. *Cic. for*] a Senatu ſtare. *Cic. at*] cur non menſa tibi ponitur à pedibus. *Mart. out of*] ab ſingulari amore ſcribere. *Cic. with*] ab aliquo gratiam inire. *Ter. with, becauſe of*] caput à ſole dolet. *Plin. in*] à viâ ſalutare. *Mart. as for*] à me pudica eſt. *Plaut.*

Abſque: *without*] abſque proœmiis. *Adag. but for*] quàm fortunatus cæteris ſum rebus abſque unâ. *Ter.*

Ad: *to*] ad reſtim res rediit. *Ter.* ab ovo ad malum. *Adag. at*] ad Græcas Calendas. *Adag.* ad Trojam bellum gerere. *Virg. towards*] ad me reſpice. *Ter. before*] ad judicem dicere cauſam. *Cic. againſt*] ad illum mihi pugna eſt. *Cic. after, hence*] utrum nunc veniam an ad decem annos. *Cic. after, according to*] ad judicium ſuum ſcribere. *Cic. for*] ad memoriam notare. *Cic. for, out of*] boves inde actæ ad deſiderium relictarum mugiebant. *Liv. about*] frequentes fuimus ad ducentos. *Cic.* ad id tempus. *Cic. on*] eſt ad hanc manum ſacellum. *Ter. by*] ad clepſydram dicere. *Adag. in*] ad inferos

pœnas

pænas parricidii luere. *Cic. as to*] ornatu ad ſpeciem magnifico, ad ſenſum acerbo. *Cic.*

Adversùs-ùm: *againſt.*] adversùs ſolem ne loquitor. *Adag.* adversùs edictum. *Ter. towards*] pietas eſt juſtitia adversùs deos. *Cic. over againſt*] ara exadversùs locum conſecrata. *Cic. with*] peropus eſt me aliquid de illâ adversùm hunc loqui. *Ter.*

Ante: *before*] ante victoriam caneretriumphum. *Adag. at, by*] ante focum, ſi frigus erit. *Virg. above*] ante me illum diligo. *Cic.*

Apud: *at*] apud Corſinium caſtra poſuit Cæſar. *Cic. with*] domi apud me. *Ter. in*] apud Platonem, apud Agathoclem ſcriptum eſt. *Cic. in, about*] apud forum eſt. *Ter. before*] verba apud Senatum fecit. *Cic. to*] apud novercam queri. *Plaut.*

Circa, circiter: *about*] afore *place, time, number*; tabernæ erant circa forum. *Quint.* circiter calendas. *Cic.* circa decem luſtra. *Horat.*

Circa moreover afore *a perſon*; circa Regem miſcentur apes. *Virg. concerning*] cur non aliquid circa patrem quærimus? *Quint. in*] præcipuè circa partis hujus præcepta elaboravit. *Quint.* circa ima ſubſiſtere. *Quint.*

Circùm: *about*] capillus circùm caput rejectus. *Ter.*

Cis, citra: *on this ſide*] hoſtis cis Euphratem fuit. *Cic.* citra Rhenum. *Caſ. within*] cis paucos dies. *Plaut. without*] non citra muſicen Grammatice poteſt eſſe perfecta. *Quint.*

Clam, clanculum: *unknown to*] clam uxorem; clam viro. *Plaut.* clanculum patres. *Ter.*

Contra: *againſt*] contra torrentem brachia dirigere.

gere. *Juven. over againſt*] Carthago Italiam contra. *Virg. towards*] aſpice contra me. *Plaut.*

Coram: *before, in preſence of*] coram Senatu. *Tac.*

Cum: *with*] ſimul conſilium cum re amiſti? *Ter. againſt*] cum principe non pugnandum eſt. *Adag. in*] cum catenis eſſe. *Plaut.* recordari cum animo. *Cic. upon*] duo juvenes cum albis equis. *Cic.*

De: *of*] Epicuri de grege porcus. *Horat. of, concerning*] ego de alliis loquor, tu de cepis reſpondes. *Adag. from*] amorem de tenero meditatur ungue. *Hor. on*] de induſtriâ. *Ter. upon*] de genu pugnare. *Sen. for*] gravi de causâ. *Cic.* amas me de fidicinâ. *Ter. out of*] de ſcripto dicere. *Cic. after*] non bonus eſt ſomnus de prandio. *Plaut. by*] de compacto rem agere. *Plaut. after, according to*] de more. *Virg. in*] ſurgunt de nocte latrones. *Juven.*

E, ex: *of, from*] feci è ſervo ut eſſes libertus. *Ter.* audivi è prædonibus. *Ter. out of*] è flammâ cibum petere. *Ter. by*] gravida è Pamphilo eſt. *Ter.* ex inſidiis capi. *Cic. on, upon*] ex equis pugnare. *Cic. according to*] facis ex tuâ dignitate *Cic. after, ſince*] ex illo fluere ſpes Danaûm. *Virg. above*] ex omnibus egregius. *Liv.*

Erga: *towards*] affecti erga amicum ſimus eodem modo, quo erga noſmet ipſos. *Cic.*

Extra: *without*] extra oſtium. *Ter. aſide*] extra oleas. *Adag. beſide, except*] extra unum te. *Plaut. without, void of*] extra culpam eſſe. *Cic. beyond, out of*] extra teli jactum. *Adag.*

In: *into*] in laqueos lupus. *Adag. againſt*] in cœlum jaculari. *Adag. upon*] pretium in capita ſtatuit. *Liv.*

upon

upon either *for* or *against*] in Cæſarem, *or* in Zoilum. *Mart. by*] in diem vivere. *Adag. unto*] gratum in vulgus eſſe ſentimus. *Cic. among*] ſpargere voces in vulgum ambiguas. *Virg. to, for*] in rem eſt. *Ter. for*] afore *time*; in hoc biduum Thais vale. *Ter. until*] in lucem bibit. *Mart. for, inſtead of*] ſua illis in legem eſt voluntas. *Sen. after*] in morem cincti. *Virg.* *In*] omnis res eſt jam in vado. *Ter. among*] quem illi eſſe in principibus facilè ſunt paſſi. *Cic.* Rarely *in*] with an Accuſative: vidit me eſſe in tantum honorem. *Ter.* or *into*] with an Ablative; utinam oculos in pectore poſſis inſerere. *Ovid.*

Infra: *beneath*] infra omnes infimus. *Ter. within*] infra ætatem. *Liv.* infra cenſum. *Hor.* ova infra dies decem edita. *Plin.*

Inter: *between*] inter malleum & incudem. *Adag. amongſt*] anſer ſtrepit inter olores. *Adag. at*] inter cænam Tironi dictitavi. *Cic. within*] inter paucos dies. *Liv. above*] pugna inter cæteras inſignis. *Liv. in*] cœpi inter vias aliam rem ex aliâ cogitare. *Ter.*

Intra: *within*] nil intra eſt oleam, nil extra eſt in nuce duri. *Horat.* intra decem annos. *Cic. beneath, ſhort of*] Hortenſii ſcripta intra famam ſunt. *Cic. into*] intra tecta vocare aliquem. *Virg.* *only in*] intra verba peccare. *Curt.*

Juxta: *nigh, by*] juxta genitorem aſtat Lavinia. *Virg. next to, after*] juxta Varronem doctiſſimus. *Gel. next under*] juxta Deos in manu tuâ poſitum eſt. *Tac.*

Palam:

Ob: *for*] ob delictum Dii pœnas expetunt. *Cic. afore*] mors ob oculos. *Cic.*

Palam: *in ſight of*] palam populo. *Horat.*

Penes: *in*] penes te culpa eſt. *Ter. in the power of*] omnia penes unum ſunt. *Cic. with*] penes vos pſaltria eſt. *Ter.* fides ſit penes authorem. *Saluſt.*

Per: *by*] per literas colloqui. *Cic. through*] per omnem urbem quærere. *Plaut.* fuſus ſanguis per venas. *Tac. over*] per mare fecit iter. *Ovid. along*] per litora certos dimittam. *Virg. for, out of*] per gratiam concedere. *Cic. for the ſake of*] per tuum genium, per tuam fidem oro. *Ter. as for*] per me licet. *Cic. between*] via ſecta per ambas, i. e. zonas. *Virg. in*] conſulti per ludibrium Pontifices. *Tac.* per tempus advenis *Ter. for*] per viginti annos erudiendis juvenibus ſtudia impendi. *Quint. upon*] per extentum funem ire. *Adag. by reaſon of*] neque per ætatem ſcire poterat. *Ter.*

Pone: *behind*] pone caſtra pabulatum ibant. *Liv.*

Poſt: *after*] virtus poſt nummos. *Horat. behind*] poſt equitem ſedet atra cura. *Hor. ſince*] poſt hominum memoriam. *Cic.*

Præ: *afore*] præ ſe armentum agit. *Liv. in compariſon of*] ego illum contempſi præ me. *Ter. for*] non poſſum præ lacrymis ſcribere. *Cic. in*] reddidi aurum quod mihi fuit præ manibus. *Plaut.*

Præter: *beſides, but*] has quidem literas præter Sibyllam leget nemo. *Plaut. againſt*] præter æquum & bonum durus eſt. *Ter. above*] quem ego anno præter omnes. *Plaut. over, beyond*] præter ripam ire. *Liv. before*] præter oculos Lollii, ſervi hæc omnia ſerebant. *Cic.*

Pro

Pro: *for*] pro aris & focis. *Adag. for, instead of*] unus Cato mihi est pro centum millibus. *Cic. afore*] hasta posita est pro æde Jovis. *Cic. in*] pro rostris concio. *Cic. after, according to*] pro meâ consuetudine dixi. *Cic.* pro spe nihil contigit. *Liv. for* or *with*] satis pro imperio. *Ter.*

Procul: *far from*] multi benè rempublicam gesserunt procul patriâ. *Cic.*

Prope: *nigh, near*] cubat is prope Cæsaris hortos. *Hor.* bellum prope à Siciliâ fuit. *Cic. almost to*] prope seditionem ventum est. *Tac.*

Propter: *for, because of*] propter te populus munera, Cæsar, amat. *Mart. near*] propter Platonis statuam consedimus. *Cic. out of*] propter metum legibus parere. *Cic.*

Secundùm: *according to*] collaudavi te secundùm virtutes tuas. *Ter. by, near*] accepit vulnus in capite secundùm aurem. *Cic. next after*] secundùm Deos homines hominibus maximè utiles esse possunt. *Cic. for, in the behalf of*] secundùm Buthrotios judicavit. *Cic. in*] secundùm quietem visa est Juno. *Cic. about, concerning*] secundùm aliquid deliberare. *Sal.*

Secus: *by, near to*] secus viam stare. *Quint.*

Sine: *without*] sine cortice nare. *Horat. without, out of*] sine dubio res est. *Cic.*

Sub: *under*] sub leges pacis tradere se. *Virg. unto*] sic, sic juvat ire sub umbras. *Virg. a little after*] sub eas literas, recitatæ sunt tuæ. *Cic.*

about, a little before] ſub veſperum Cæſar portas claudi juſſit. *Caſ. into*] ſub amplexus alicujus ire. *Ovid. under*] ſub haſtâ vœnire. *Liv. about, afore*] ſub exitu vitæ. *Suet. in*] ſub dio. *Horat.*

Subter: *under*] agere vias ſubter mare. *Virg.* ſubter denſâ teſtudine. *Virg.*

Super: *above*] famâ ſuper æthera notus. *Virg.* ſuper octingentos annos. *Tac. beyond*] ſuper Indos proferet imperium. *Virg. beſides*] ſuper eas civitates, quas memoravi. *Tac. upon, concerning*] juxtà mecum rem tenes ſuper Euclionis filiam. *Plaut. at*] Beſſus circumferri merum largiùs jubet, debellaturus ſuper menſam Alexandrum. *Curt.*

About, concerning] multus eâ ſuper re rumor. *Tac. about, for*] ſuper ſuâ molitur laude laborem. *Virg. upon*] ſuper arbore ſidunt. *Virg.*

Supra: *above*] ſupra lunam ſunt omnia æterna. *Cic. upon*] injicere quempiam ſupra ſtercus. *Cic. near*] dux hoſtium cum exercitu ſupra caput eſt. *Sal. above, more then*] tres prohibet ſupra [cyathos] rangere gratia. *Horat. beyond*] ſupra fidem. *Quint.*

Tenus: *to, unto*] lateri, capulo tenus, abdidit enſem. *Virg. as to*] verbo tenus, acutè. *Cic. up to*] umbilico tenus aqua eſt. *Liv.* aurium tenus. *Quint.* pectoribus tenus erectus in auras. *Ovid. down to*] crurum tenus a mento palearia pendent. *Virg.*

Trans: *over*] trans mare currunt. *Horat. beyond*] trans Tiberim horti. *Cic.*

Verſus:

Versùs: *to, towards*] Brandusium versùs ire. *Cic.*
Ultra: *beyond*] ne sutor ultra crepidam. *Adag.*
Usque: *even to*] à Romulo usque Augustum. *Flor.* usque terminos Libyæ. *Justin.*

Many of these used without a Case have other significations; as contrà, secus *otherwise*] contrà venit. *Horat.* rectè an secus nihil ad nos. *Cic.* *o'th'other side*] si laudabit illius formam, tu hujus contrà. *Ter.* supra *afore*] supra demonstravi. *Cæs.* usque *almost*] me usque occidit. *Ter.* *always*] mihi usque curæ erit. *Cic.*

Sometimes the Præposition implies or stands for its Compound Verb; as nec fuga jam *super*, for *superest*. *Virg.*

The Præpositions have a special use and signification in Phraseology, and also in Composition:
Divers are used to signify an Office; as servus à pedibus *or* circum pedes. *Cic.* ad pedes. *Mart.* *a foot-boy.* liberta à manu *a handmaid.* *Suet.* servus ad manum *an Amanuensis.* *Cic.*
Others make Adverbial forms; as è vestigio, extemplo *forthwith.* *Cic.* ad amussim, examussim *exactly.* *Plaut.* in immensum *greatly.* *Plin.* in propinquo *or* proximo *near.* *Ter.* pro virili *stoutly.* *Cic.* pro certo, pro comperto *certainly.* *Liv.* de reliquo *lastly.* *Cic.* de improviso *suddenly.* *Ter.*

Many Præpositions in certain Compounds vary the sense of the simple; as surdus *deaf*, absurdus *silly*: statio *a stand*, superstitio *a false worship*: oleo *to*

ſmell; adoleo to burn: ploro to bewail, exploro to ſearch: emo to buy, interimo to ſlay.

Through the foregoing Rules of Government the words which govern, admit Præpoſitions with their Caſes; as ad rem avidior. *Ter.* condemnatus de aleâ. *Cic.* dominari in ſuos. *Cic.* quid tibi in Epheſo eſt? *Cic.*

VERBS Compounded

With theſe Præpoſitions *ad, ante, con, de, ex, in, inter, ob, poſt, præ, ſub, ſuper,* govern a Dative Caſe. *viz.* when the Particles, coming after Engliſh verbs, are not latin'd to govern by appoſition, but to compound the Verb. v. gr.

At: ad] epulis accumbere. *Virg.* to] vinum ægrotis non adhibere, melius. *Cic.* by] affidet Jovi. *Ovid.* upon] fortuna mihi affulſit. *Liv.*

After: poſt] omnes poſthabui mihi res. *Ter.*

Againſt: ob] obniti adverſis. *Tac.*

Afore, before: ante, præ] amicitiam omnibus rebus antepono. *Cic.* ultima primis præponere. *Horat.*

Between: inter] homo homini quid intereſt? *Ter.* dies intercalares menſibus interponere. *Liv.*

From: de, ex] detrahit autori multum fortuna. *Ovid.* excuſſit mihi lacrymas. *Ter.*

Into: in] injecit ſe focis. *Mart.* in] innaſcitur homini probitas. *Cic.* upon] baculo incumbere. *Ovid.* againſt] caput parieti impingere. *Plin.*

Under: ſub] mihi res, non me rebus ſubmittere conor. *Horat.* ingenti ſubière feretro. *Virg.*
Upon: ſuper] corpori hoſtis ſuperſtare. *Liv.*
with: con] principiis conſentiant exitus. *Cic.*

Certain Nouns compounded with ſome of theſe Prepoſitions govern a Dative. as ſigna obvia ſignis. *Luc.* prævius auroræ. *Cicero in Arat.* invia virtuti nulla eſt via. *Ovid.*

Sometimes the Engliſh Particle, latin'd by a Præpoſition in the Compound, is made to govern the ſame Caſe, as it would alone. *viz.*

From: de, ex, ab] cælo delabi. *Virg.* expellere pectore curas. *Luc.* abire magiſtratu. *Cic.*
Under: ſub] tecta ſubimus. *Virg.*
Upon: ſuper] ſupernatat amnem. *Luc.*

Moreoften the Particle, Latin'd both in the Compound and after it, governs the Caſe; v. g. Ad vos accommodavi Orationem meam. *Cic.* vitam cum vitâ conferre. *Cic.* ſe ab omnibus moleſtiis abducere. *Cic.* decedere de ſuo jure. *Cic.* in amore inſunt vitia. *Ter.* in caſtra prælium intulit. *Liv.* Galli, inter equites, ſagittarios interjecerunt. *Cæſ.*

Laſtly it may be noted that, the Particle after ſome Engliſh Verbs makes them to be latin'd by different Simple Verbs; as *to hide* tego, *to hide from* celo: *to draw* traho, *to draw near* propinquo: *to take* capio, *to take away* tollo. Alſo the ſame Particle afore and after is differently latin'd; as *to ſtand under* ſubſto, *to underſtand* intelligo: *to ſtand with* aſſiſto, *to withſtand* reſiſto: *to go out* exeo, *to outgo* præcurro.

DERIVATIVES

Govern the Caſe of the PRIMITIVES:

The Infinitive, Gerund, Participle, and ſometimes a Noun, govern the Caſe of the Verb; as ſcit uti foro. *Cic.* utendum eſt ætate. *Ovid.* me uſurus æquo es. *Cic.* non ego credulus illis. *Virg.* quid tibi nos tactio eſt? quid tibi hanc rem curatio eſt? *Plaut.*

So from *obvius*, obviam ire cupiditatibus. *Cic.* from *prope*, propior fidem. *Liv.*

The Government of MOODS.

Certain words govern a Subjunctive Mood.

1. Indefinites:

Words not uſed in a queſtion, nor in a particular, but in a general ſenſe; moſt of them having or admitting [*-ſoever*] after them, or elſe following ſuch Verbs, to *doubt*, *know*, *hear*, *ſee* &c. viz. quoquo ſe verterint Stoici. *Cic.* honeſtúmne factu ſit an turpe, dubitant. *Cic.* vide quid agas. *Ter.* neſcis qui vir ſim. *Ter.* expecto quid velis. *Ter.* non intereſt quali cibo utaris. *Cic.*

2. Cauſals:

That ut, quòd: Brutus erat ſtulti ſapiens imitator, ut eſſet tutus. *Ovid.* laudo quòd ſedem figere Cumis deſtinet. *Juven.* *becauſe that* qui, quippe qui;

leſt

left that ne; *would that* utinam; *as if that* perinde ac ſi, perinde atque ſi: *e. g.* ſtultus es, qui huic credas. *Ter.* ſapientis eſt, ne fallatur, videre. *Cic.* utinam id ſit quod ſpero. *Ter.* perinde ac ſi in hanc formulam omnia concluſa ſint. *Cic.*

N. B. After a Verb of *fear* the Particle *that*, is render'd ne; *that not*, ut; as *you are afraid that you ſhall have her*; *and you, that you ſhall not* id paves, ne ducas tu illam; tu autem, *ut ducas. Ter.* See* *p.* 102.

After ſuch Imperatives, *cave*, *fac*, the Particle (*that*) is oft omitted; *e. g.* cave facias. *Cic.* fac promiſſa appareant. *Ter.*

3. Other Particles, having [*that*] expreſt or implyed, commonly govern a Subjunctive Mood: *viz. Afore*, *before* antequam, priuſquam; *after* poſtquam, poſteaquam; *but*, *except* niſi, quin; *if* ſi; *but if* quòd ſi; *till* dum, donec; *when* cùm, quum; *while* quoad; *although* licet, quamvis, etſi; *as ſoon as* ſimul ac, ſimul atque; *e. g.* ante pudor quàm te violem. *Virg.* ſi mea cum veſtris valuiſſent vota. *Ovid.* cùm nihil obſint doli. *Ter.* quamvis increpitent ſocii. *Virg.* omne animal, ſimul atque natum ſit, voluptatem appetit. *Cic.*

Not ne [*forbidding*] will have an Imperative or Subjunctive; as *don't ſwear* ne jura. *Plaut. do not do, what you doubt* quod dubitas, ne feceris. *Plin.*

Engliſh words of various ſignification

Are to be rendred by different Latin words, whereof a brief ſpecimen is here propoſed.

The examples here omitted are found elſewhere in the Table; beginning Page 84, ſet to their reſpective Particles.

A: one] *all are killed to* (*a*) *man* ad (*unum*) omnes interficiuntur. *Caſ. ſome*] *it is* (*a*) *pleaſure to weep* eſt (*quædam*) flere voluptas. *Ovid. each*] *the Sun makes two returns* (*a*) *year* ſol binas [*ſingulis*] annis reverſiones facit. *Cic. another*] (*a*) *Mars* Mars [*alter.*] *Liv. in*] *when Craſſus was* (*a*) *bed* cum [*in*] lecto Craſſus eſſet. *Cic. on*] *I will be here* (*a*) *Tueſday* adero die Martis. Oftimes (*a*) changes the Noun; as *youth* juventus, *a youth* Juvenis. [*a*] between the Verb Subſtantive and a Participle in-*ing* is redundant; as *he is* [*a*] *writing* ſcribit.

About] circa. *concerning*] de. *well nigh*] circiter. *about, as it were*] ſol mihi videtur *quaſi* pedalis. *Cic.*

Abroad] foris. After a Verb of *motion to*, foras. *all abroad*] paſſim or latè.

According to] ſecundum. *according as*] *pro eo ac* me reor. *Cic. perinde ut* opinio eſt. *Cic. prout* cujuſque libido eſt. *Horat. utcunque* opus ſit. *Ter.*

Afore, before] ante. with a Verb or *afore that*] *antequam* macies occupet malas. *Horat. ante* mortua eſt *quàm* tu natus eſſes. *Cic. in preſence of*] coram. *the day afore*] pridie.

After] poſt. with a Verb; or *after that*] *poſtquam* aſpexi, illico cognovi. *Ter.* after *manner*, or *faſhion*] ad, in, de. *next after*] *proximè* hos cari. *Cic. the day after*] poſtridie. *afterwards*] poſtea.

Againſt] adverſus, contra, in. *over againſt*] Luna, cum

cum eſt *è regione* ſolis, deficit. *Cic. until*] expectabo *dum* veniat. *Ter.* afore a Noun of *time*] *in* craſtinum vos vocabo. *Plaut.*

All] omnis. *whole*] *totâ* mente. *Cic. all alone*] nunquam minus ſolus quàm cum *ſolus. Cic. all one* after the Verb *am*] idem. *nothing at all*] nihil quicquam. *all in all with*] *M.* Antonii *perfamiliaris. Cic. when all comes to all*] denique. *all under one*] unâ operâ. *Ter. all at once*] ſimul. *at all*] nihil *omnino. for all, for all that*, in a former clauſe, ſignifying *although*] quamvis; in a latter [*yet*] tamen.

Along] per. *along with*] unà cum.

As] *ut* nunc ſunt mores. *Ter. while*] *dum* ante oſtium ſto. *Ter. As, as*; or *ſo, as*] tam, quàm; cùm, tum; tum, tum; æquè, ac: *e.g. tam* fœlix utinam, *quàm* candidus eſſem. *Ovid. cùm* vir optimus *tum* egregius Poeta. *Quint. as to, as for, as concerning*] quod ad, quantum ad; *e.g.* quod ad Pomponiam, ſcribas velim *Cic.*

At] apud. *near*] ad. afore a *place*] in. after *begin*] incipiam *a* Romulo. *Cic. at once*] ſimul.

Away] abi. *away with*] *apage* te. *Ter.* iſthæc *auferte. Ter. away with* after *cannot*] patior, fero *e.g. non poſſum ferre* Græcam Urbem. *Juv.*

Become] quid illo *fiet. Ter. beſeem*] quod *decet*, honeſtum eſt. *Cic.*

Behind: in *place*] *ponè* ſubit conjux. *Virg.* in *order*] etiamne quid *porrò? Ter. beneath*] belli laude *inferior. Cic.*

Being] natura. *as being*] numerabilis, *utpotè* parvus. *Horat.* Sol Democrito magnus videtur, *quippe* homini in Geometria perfecto. *Cic. to have a being*] eſſe.

eſſe. *far from being*] multum *abeſt ut* impedimento ſim. *Liv. near being*] *prope fuit ut* dictator crearetur. *Liv.* with a Noun or Participle is Redundant; as *being baniſht Exul* ab octavâ Marius bibit. *Juv.*

Beſide] præter. *near to*] prope. *moreover*] præterea. *beſide himſelf*] animi impos. *Plaut. beſide the matter*] abs re. *Ter.*

Beyond] trans, ultra. *above*] ſupra.

Both] ambo. *both-and*] *et* terris jactatus *et* alto. *Virg. tum* in pace *tum* in bello. *Cic.*

But] ſed. *only*] nomen *tantùm* virtutis uſurpas. *Cic. beſides*] ego *niſi* ipſi nummum credam nemini. *Plaut.* after *cannot*] non or quin; *e.g.* non poſſum *non* amicus eſſe. *Cic.* non poſſum *quin* exclamem. *Cic.* after *never, not doubt, not fear, not queſtion*] quin; *e.g.* nunquam intermittit diem *quin* ſemper veniat. *Ter.* non dubium eſt *quin* uxorem nolit filius. *Ter.* after *nothing elſe*] nihil aliud *quàm* dolet. *Ovid. but if*] *quod ſi* reſciverit. *Ter. which not*] qui non; nemo eſt qui neſciat. *Cic. i.e. qui non* ſciat.

By] per. *becauſe of*] propter. *near*] ſecus, prope. after a *Paſſive*] a, ab. *by and by*] illico. *by the by*] obiter. *hard by*] præſtò. *to be by*] adeſſe. *by heart*] memoriter. Between a Noun repeated, it makes an Adverb; as *day by day* quotidie; *man by man* viritim.

Down] lanugo. the Adverb, deorſum. The Particle compounding, de; as *to come down*] deſcendere. *to turn up ſide down*] invertere. *quite down the mind*] dejectus. *up and down*] ſuſque, deque.

Either] uter. *either-or*] *vel* duo *vel* nemo. *Perſ.*

Elſe a *noun*] alius. an Adverb, *beſides*] tibi uni concedam

cedam *præterea* nemini. *Cic. more*] quid vultis *amplius. Cic. otherwiſe*] aliter, alioqui, cæteroquin.
even] par. *ſmooth*] æquus, planus. *evening*] veſper.
with a Pronoun] tute *ipſe. Ter.* Idem *ipſe* vir. *Cic.*
a Particle] *etiam* nunc mihi ſcripta illa dicta ſunt in animo. *Ter.*
Ever, always] ſemper. *at any time*] neque, quis eſſet, *unquam* audieram. *Ter. or ever, afore that*] *ante* novis rubeant *quàm* prata coloribus. *Virg. ever ſince* with a Verb] *ex quo* Tydides ſcelerumq; inventor Ulyſſes aggreſſi. *Virg.* with a Noun] *jam inde a*; *jam uſque a*; *jam inde uſque a* puero mihi amicus eſt. *Plaut. ever a one*] ſi *quiſquam* eſt. *Ter. ever and anon*] ſubinde. *Ever the*, afore *a Comparative*, is redundant; as *how is he ever the wiſer?* quî ſanior. *Hor.*

Fall] cado. With the ſign [*a*] before the Participle in *-ing* 'tis made by *cæpi*, and the Participle by an Infinitive; as *he fell a bawling, laughing*, clamare, ridere cœpit. *Cic. to fall in hand with*] aggredior. *to fall in love with*] adamo. *to fall out with*] iraſcor. *to fall* or *ſet upon*] invado. *to fall foul upon*] invehor. *to fall away*] macreſco.
Far] longinquus. *from far*] peregrè. *far from*] procul. *a Particle of diſtance* or *compariſon*] *longè* diſcedere; *longè* doctiſſimus. *Hor. as far as, ſo far as* afore a Verb] *quantum* audio. *Ter. as far as from*] *ex* Æthiopiâ eſt *uſque. Ter. as far as to*] perſequuntur *uſque ad* flumen. *Cæſ. ſo far that*] *uſque eò* eſt commotus *ut* furere videretur. *Cic.*
For] in the beginning of a clauſe *nam. because of*] ob, propter. *inſtead of*] pro. Afore a Noun of *of time*]

ad, in. Afore an Infinitive, redundant, as *they co* [*for*] *to ſee* ſpectatum veniunt. *Ovid.*

How] quomodo. Afore an Adjective, Adverb or Verb of Paſſion] *quàm* dives. *Virg.* *quàm* venuſt *quàm* vellem, *quàm* gaudeo. *Ter.* *ut* magnus v eſt. *Plaut.* *how is it that?*] *qui fit ut*, ego quo neſciam, ſciant omnes? *Cic.* *how* afore the Pa ticle [*that*] is redundant; as *he writ* [*how*] *that h would have me come* ſcripſit quòd cuperet me v nire. *Cic.*

Laſt] ultimus. *laſt paſt*] proximus; *afore the laſt*] i perior; as quid *proximâ* quid *ſuperiore* nocte eg ris. *Cic.* *at laſt*] tandem, demùm. *to laſt*] durare. *laſt*] crepida.

Leave] venia. *to leave*] linquo. *to leave off*] deſino. *leave out*] omitto.

Let] mora, obſtaculum. *to let*] ſino, patior. *to hinder*] impedio. *to let a houſe* or *land*] eloco. *to let out*] o mitto. *to let in*] admitto. *to let alone*] omitto, mitto.

Like] ſimilis. *it likes*] placet. *to like*] probo. *like enough*] veri ſimilis. *like to be*] prope eſſe. *like to*, *after the manner of*] ad, in morem, de more. *like*, *about to*] a ſign of the partic. future; as moriturus.

Long] longus. *to long*] percupio. *a long while*] diu. *long of*] *per* me ſtetit. *long ago*] olim. *as long as*] tantisper dum, donec, quàm diu.

Man] homo. noting *age* or *ſex*] vir. *a ſervant*] ſi mulus. with *kind*] *humanum* genus. *if a man*] ſi *quis*. *I am not my own man* i. e. *at my own command*] non ſum mei juris. *Cic.*

Mate

More] magis. *more than, above*] amplius, plus. *moreover*] porrò.

Most] maximè. with a Substantive] plerique. *most an end*] plerunque.

Much] multùm. in *comparison*] multò. *even just as much*] tantundem. *with much ado* or *not with out much ado*] vix, ægrè. *much good d' it you*] prosit. *to make much of*] indulgere. *to think much of*] gravari; *e.g.* lautus es, qui gravaris ad me literas dare. *Cic.*

Near] prope. *thrifty*] parcus.

Neither] neuter. *neither, nor*] nec, neque.

Never] nunquam. a Particle of *forbidding*] ne; as *never fear him* ne metuas. *Ter.* *never a*] nullus. *never the* afore a comparative] *nihilo* secius mox deferent puerum. *Ter.* *never so* afore an Adjective] *quantumvis* rusticus. *Hor.* But after [*although*] a *sign* of the Superlative degree, as quamvis doctissimus.

No] non. afore a Substantive] nullus.

On or *upon*] super. *concerning*] de. after *depend*] ab. after *bestow*] in. afore *this side, hand*, or *part*] a, ab. *off and on*] inconstans. *on a sudden*] repente. *to go on*] pergere.

Or] vel. between two words of the *same sense*] sive.

Over] supra. *beyond*] ultra. *through*] per, trans. *too*, afore an Adjective *nimis* acer. *Cic.* *all over*] totus, penitus. *over and above*] insuper.

Ought] debeo. after a Verb] res, aliquid; as mihi tecum *res* est? *Cic.* *good for ought*] nunquam eris *bonæ frugi* *Plaut.* *for ought* afore a Verb] *quantum* ego perspicio. *Cic.*

Out

Out of] ex, extra. *without*] sine. *for*] propter. *out of heart*] exanimis. *to be out with*] irasci. *out with it*] effer *or* ejice illud. *to be quite out*] toto cœlo errare. *Own*] suus. *to own*] agnosco. *to own, to claim*] asserere. *own self*] ipse.

Since, from] ab, ex. *ago*] annos *abhinc* quatuordecim. *Cie. since, where as*] *cum* hæc ita sint. *Ter.*

So] sic, ita. afore an Adjective or Adverb] tam. *So, if that*] occidat, *modo* imperet. *Suet.*

That a Conjunction 1. *to the end that*] ut; vis quantum accipis ut clames, accipere ut taceas. *Mart.* *So, that*] vultu *adeo* modesto, *ut* nihil supra. *Ter.*

2. *because that*] quòd; hei mihi quòd domino non licet ire tuo. *Ovid.* Observe that, the Particle *that* is to be Latin'd by *quòd* after Verbs that any way imply *knowledge, sense, passion, speech, shewing*, and the like, v.g. nec credit quòd brumæ rosas innoxia fervet. *Claudian.*

3. *least that*] ne; charta ne nos prodat, pertimesco. *Cic. that not* after a Verb of *fear* may be *ne*; dies ut satis sit, vereor. *Ter.*

The Articles *That* or *what*, being properly English Neuters, are also used for *this*, or *who, which.*

The a note of distinction] ille; as *I the man*] ille ego. *Ovid. the, the* afore two Comparatives] quo quanto; eo *or* hoc tanto, v.g. voluptas quo est major, eo magis mentem è sua sede dimovet. *Cic.* a sign of a noun in both numbers; as *the man, the men*] vir, viri.

Then] tunc. after a Comparative] quàm. *then*; *next*] deinde.

Too] etiam, quoque. afore an Adjective] nimis.

Together] unà, simul. with a Noun of *time*] *per* quindecim dies. *Liv.*

Very afore an Adjective] valdè, admodùm. afore a Substantive] ipse. *even*] etiam, vel; Virgilium vel tua rura dabunt. *Mart. mere*] purus, purus putus, merus; as, purus putus Sycophanta est. *Plaut* meræ nugæ. *Cic.*

To use] utor. *to be wont*] soleo.

when] cùm. the Interrogative or Indefinite] quando.

whether] num, an. *whether, or*] sive, sive, seu, seu; as sive taceo, seu loquor. *Plaut. whether or no*] necne. *whether* implying *choice*] uter. *whither*] quò.

without] sine, absque, extra. *to be without*] careo; as caret culpâ. *Perf.*

Yet] tamen. *as yet, hitherto*] adhuc. *not yet*] nondum. *and yet*] quamquam, etsi; e.g. do pœnas temeritatis meæ, etsi quæ fuit illa temeritas?

There might be also a Table of Latin words, that for their divers significations are to be render'd by various English words, and some of those Latin words accordingly require divers Cases, *viz.*

Auscultо *to hear*; te auscultabo lubens. *Plaut. to obey*; an auscultem senibus. *Ter.*

Consulo *to ask counsel*; oracula consulere. *Ovid. to give counsel* or *to take care of*; consulere matri. *Plaut.* fortunis. *Cic.*

Metuo *to be afraid of*; metuebant omnes jam me. *Ter. for*; metuo patris. *Plaut.* But such words belong to the Latin institution.

A RULE to turn ENGLISH into LATIN or LATIN into ENGLISH.

Find out

1. The Verb, by the ſign *do* or *am*.
2. The Nominative Caſe, by asking *who* or *what* with the Verb.
3. The Caſe following the Verb, by asking *whom* or *what* with the Nominative and Verb.
4. The Noun agreeing with the Caſe afore or after the Verb, by putting *who* or *what* to the Caſe afore found.
5. Other Nouns govern'd of the Caſe afore or after the Verb, by their ſigns.
6. The Indeclinables, with their Caſes.

Laſtly the Subſtantive with a Participle, neither agreeing with the Verb, nor govern'd of any other word, is the *Ablative Abſolute*.

THE FIGURES.

Beſides the plain *Regular* way, there is alſo a *Figurative* way of Speech.

A Figure is 1. The *make* of a word. (whereof *page* 5.) 2. The *change* of letters, or conſtruction; differing from the common uſe.

A Figure is. 1. Grammatical. 2. Rhetorical. 3. Poetical; (of the laſt in its place.)

The Grammatical Figures

may be generally three.

1. PLEONASMUS. 2. ELLEIPSIS. 3. ENALLAGE.

To theſe the reſt may be reduced; which are more in Latin then in Engliſh.

Theſe three are obſervable.

1. In Single Words.

PLEONASMUS *adds* one or more letters to a word; ELLEIPSIS *takes away*: Both in three places.

Pleonaſmus in an Engliſh word is rarely found.

1. In the beginning. Protheſis adds; as *they ſpake not aright.* Jer. 8. 6. i.e. *right.* gnatus for natus, tetuli for tuli. *Ter.*

Aphæreſis takes away; as *'tis* for *it is.* *'ſt* for *eſt. Plaut.*

2. In the middle. Epentheſis adds; as *Induperator* for *Imperator. Juven.*

Syncope takes away, as *ſev'ral* for *ſeveral*; dixti for dixiſti. *Ter.*

3. In the end. Paragoge adds; as dicier for dici. *Perſ.*

Apocope takes away; as *lo* for *look* Gen. 8. 11. vide n. *Ter.* for videſne.

ENALLAGE *alters* a letter; the English, frequently (*f*) into (*v*) plural; as *life*, *lives*. vorto for verto. *Ter.* this is called Antithesis.

Or it *displaces* a letter, commonly (*r*); as *brun* for *burnt*; Evandre for Evander. *Virg.* this is a Metathesis.

2. In a Sentence.

PLEONASMUS adds a word; as *he was an hungred.* Mat. 4 2. for *he was hungry. What and if?* John 6.62. for *what if?* Nemo homo. *Ter.* itaque ergo. *Liv. we have seen with our eyes*, 1 John. 1.1. Hisce oculis egomet vidi. *Virg.* To this may be added:

Polysyndeton *multiplies* the *Copulatives*; as *Peter and James and John and Andrew.* Act. 1. 13. Alcandrumque Haliumque Noëmonaq, Pritanymq; *Ovid. neither death nor life nor angels nor principalities* &c. Rom. 8.38,39. neque privati quicquam neque publici neque profani neque sacri reliquisse. *Cic.*

ELLEIPSIS takes away; as *up.* Gen. 44.4. i.e. *get up.* paucis te volo. *Ter.* i.e. verbis colloqui.

The English Relative is often omitted; as *let them suffer the punishment they deserve*, dent pœnas quas meruere pati. *Ovid.* Add here likewise:

Asyndeton *leaves* out the *Copulatives*; as *Love, joy, peace, long suffering, gentleness* &c. Gal. 5. 22. Grammaticus, rhetor, geometres, pictor, aliptes. &c. *Juven.*

ENALLAGE alters:

1. The *Gender* of the Adjective; which the English distinguish not; but the Latins sometimes make it agree with a Substantive *understood* in the other *expressed*; as Centauro in magnâ. *Virg.* i.e. navi.

2. The

2. The *Number*: A Substantive singular signifying a *multitude*, may agree with a plural Verb or Adjective; as *the race of Titan are destroyed* Titania pubes dejecti volvuntur. *Virg.*

Where note, a Substantive Plural implied in the Singular gives number to the Verb, number and gender to the Adjective; as in the Noun [*race* pubes] is understood *Sons* filii.

This Enallage of Gender and Number is called Synthesis.

Also the Verb or Adjective, that in Number or Gender agrees with the *nearest* Substantive, may be referred to others *remote*; as *length of days is in her right hand, and in her left riches and honor*. Prov. 3.16. hic illius arma, hic currus fuit. *Virg.* So, utinam hic surdus, aut hæc muta facta sit. *Ter.* This is called Zeugma.

3. The *Case*; as *himself lodged that night in the company*. Gen. 32. 21. ipsum ut viva, optant. *Ter.* this is called Antiptosis.

The *Case* sometime is *transposed*; as *who maketh his Angels Spirits*. Ps. 104. 4. i. e. *his Spirits Angels*. in nova mutatas corpora formas. *Ovid.* i. e. mutata corpora in novas formas. this is Hypallage.

4. Enallage of *Tense*; as *their come seven years of great plenty*. i. e. *shall come*. Gen. 41. 29. adeon' ad eum: *Ter.* for adibon'.

5. Of *Voice*; the *Active* for *Passive* or *Neuter*; as *it is better to marry than to burn*. i. e. *to be burnt*. 1. Cor. 7. 9. prora avertit. i. e. avertitur. *Virg.*

6. Of *Place*; that *displaces* the *parts* of a *Compound*, by putting a word between the components; as *what man soever*. Levit. 17. 3. i. e. *what soever man*, v. 8. 10. 13. qui te cunque manent casus. *Virg.* i. e. quicunque. this is called Tmesis.

The Rhetorical Figures

Are two.

1. A *Trope* is the *change* of a word from the genuine ſignification.

2. A *Scheme* is a *new order* of the words in a Clauſe or Sentence.

Both give a grace and ornament to the Speech.

A Trope.

There are 4. *Tropes*: a METAPHOR, a METONYMIE, a SYNECDOCHE, an IRONIE.

A Metaphor.

Metaphor alters the ſenſe of a word *by a ſimilitude*; and ought to be explained by the Particles of *likeneſs*; *v. g. The Valleys laugh.* Pſ. 65. 14. ridet ager. *Ovid.* for as laughter in the face, ſo verdure in the field ſeems cheerful. *The golden City.* Iſa. 14. 4. ætas aurea. *Ovid.* i.e. as gold is the beſt of metals, ſo the City or Age the beſt of all others.

A Metonymie.

Metonymie takes one word inſtead of another, for the *Affinity* of their ſignification: two ways.

1. The *Cauſe* is taken for the *Effect*; or the *Effect* for the *Cauſe*.

Two *cauſes* chiefly are thus uſed: the *Efficient*, Autor or Inſtrument, that makes the thing; or the *Matter*, out of which the thing is made.

1. The *Autor* for the *Work*; as *they have Moſes and the Prophets*, &c. Luc. 16. 29. i.e. their writings.

Pellibus

Pellibus exiguis arctatur Livius. *Mart.* i.e. opus. Livii. Alſo the *Inſtrument* for the *Effect*; as the *ſalutation with mine own hand*, i.e. *handwriting*. 1 Corinth. 16.21. Mentoris hæc manus eſt. *Mart.* i.e. cœlatura. *They ſacrifice to their net.* i. e. *their prey.* Hab. 1. 16. retia me paſcunt. i.e. præda retibus capta. *Ovid.*

Alſo the *Inſtrument* for the *Autor*; as *a net ſpread upon Tabor.* Hoſea 5.1. i.e. *a lyer in wait.* retia dolum meditantur. *Virg.* i.e. retiarii.

The *Work* for the *Autor*; as *there are two Nations in the womb.* Gen. 25.23. i.e. *Jacob* and *Eſau*, the Autors of two Nations. pænas dedit illud opus. i.e. Ovidius autor operis. *Death in the Pot.* 2 Kings 4.40. i.e. *cauſe of death.* Pallida mors. *Horat.* i.e. cauſa palloris.

2. The *Matter* for *what is made out of it*; as *he was laid in iron.* i.e. *chains made of iron.* Pſal. 105.18. compeſcere culpam ferro. *Virg.* i.e. inſtrumento.

The *Perſon* or *Thing* for the *Matter*; as *they have taken away the Lord.* i. e. *the Body.* John 20. 2. raptaverat Hectora. *Hor.* i.e. corpus. plenæ ſororibus urnæ. i.e. corporibus. *Juven.*

The two other Cauſes alſo, the *Form* and the *End*, are uſed for their *Effects*, and their *Effects* for them.

3. The *Forme* for what is *formed* by it; as *the Soul that ſinneth ſhall dye.* Ezek. 18.4. *Soul* for the *Man.* Animâque litandum eſt Argolicâ. *Virg.* i.e. Virgine.

The *formed* for *the Forme*; as *Dives ſeeth Lazarus &c.* Luc. 16.23. i.e. *Men* for *Souls.* Dictator eas & Conſul ad umbras. *Lucan.* i.e. tua Dictatoris & Conſulis anima.

4. The *End* for the *means*; as *awake, my glory*, Pſ. 57.8. i.e. *tongue, to glorifie.* ſee Pſ. 16.9. and Act. 2.26.

Aris imponet honorem. *Virg.* i.e. victimam in honorem. *I am the life* i.e. *means of a happy life.* John 11.25. obsecro te, mea vita. *Cicero* ad Terentiam.

The *means* for the *end*; as *Behold he (or it) is to thee a covering of the eyes unto all.* Gen. 20.16. *covering for chastity, by him or it covered.* Edisti nunquam Gellia, tu leporem. *Mart.* i.e. non es pulchra, lepus enim comestus, conducit ad pulchritudinem.

3. The *Subject* for the *Adjunct*; or contrariwise.

The Subject is the *Principal*, the Adjunct is the *Accessory* that *belongs to* it, or *is in* it; both may be used in a various sense, chiefly as follows.

The *Subject &c.* 1. The *place* or what *contains*, for what is *contained*; as *to drink the cup of the Lord.* 1 Cor. 10.21. i.e. *the wine or blood.* haurire pateram. *Virg.* i.e. vinum è patera. *Give ear, O earth,* Isa. 1.2. i.e. *inhabitants.* effudit in me carcerem. *Cic.* i.e. incarceratos. *how many baskets took ye up?* Matt. 16.9.10. i.e. *full of meat.* consumere mensas. i.e. cibos, secundæ mensæ. i.e. epulæ. *Virg. He wanteth a heart,* i.e. *understanding.* Prov. 6.32. hircus habet cor. *Mart.* i.e. sapientiam in corde.

2. The *Person* for his *image, possession,* or *relations*, as *Jehu destroyed Baal.* i.e. *Images of Baal.* 2 Kings 10.28. crepat ingens Sejanus. i.e. statua Sejani. *Juven. Judah shall be inhabited.* Joel 3.20. i.e. *Judea.* ardet Ucalegon. *Virg.* i.e. domus. *They eat up my people* i.e. *their possessions.* Psal. 53.4. quid te futurum censes, quem assidue excedent? *Ter.* i.e. opes. *Saul, why persecutest thou me?* Act. 9.4. i.e. *my members.* ego Telephon hasta

pugnan-

pugnantem domui; quòd Thebæ cecidere, meum eſt &c. i.e. Ulyſſes pro Achille & Myrmidonibus. *Ovid.* *Joſhua deſtroyed the Cananites.* Joſ. 11. 21. i. e. *Joſhua and all the people,* v. 7. Hannibal ad portas. *Juven.* i.e. exercitus Hannibalis.

The *Perſon* or *thing* for the *time*; as *the martyrdome of Charles the Firſt.* i.e. *the year of the Lord* 1648. mors Alexandri. i.e. Olympias 114. or Coſs. L. Furio, & D. Junio. *Diodor.* *The building of the Temple.* i.e. 480 *years after Exodus.* 1 King. 6. 1. V.C. or *The building of Rome.* i.e. Olymp. 7. an. 1. Dion. Halicar. lib. 1.

The *Adjunct* &c. 1, *The thing contained* or *inherent* for the *Subject*; as *my belly is as wine that hath no vent* i.e. *a veſſel of wine.* Job. 32. 19. vina coronare. *Virg.* i.e. phialam. *who is able to ſtand afore envy?* i.e. *the envious.* Prov. 27. 4. ex hac parte pudor pugnat, illinc petulantia; hinc pudicitia, illinc ſtuprum &c. *Cic.*

The *ſign*, or *time* for the *perſon* or *thing*; as *the Scepter ſhall not depart.* Gen. 49, 10. i. e. *the Kingdom.* cedant arma togæ. i. e. bellum paci. *Cic.* *over Edom will I caſt out my ſhoe.* i. e. *I will ſubdue Edom*; the ſign of *ſlavery*, for *it.* Pſ. 60. 8. Si dare ſutori calceus iſta poteſt. *Mart.* calceus. i.e. ars calcearia. *days ſhould ſpeak.* Job. 30. 7. i.e. *men of years.* ſecula miteſcent. *Virg.* i.e. homines in ſeculo.

Here may be added, the *Antecedent* for the *Conſequent*; as *O that my people had hearkned unto me.* i.e. *obeyed.* Pſal. 81, 13. neque audit currus habenas. *Virg.* i.e. paret. *if thou doeſt not well, ſin lyeth at the door.* i.e. *puniſhment.* Gen. 4. 7. hic ſunt decem minæ. i.e. ancilla, empta. *Ter.* *thou ſhalt eat the labor of thy hands*

Pſal. 128. 2. i.e. *meat got by labour.* Pingue ſolum laſſat, ſed juvat ipſe labor. *Mart.* i.e. fructus labor.

The *Conſequent* for the *Antecedent*; as *he that believeth ſhall not make haſte*, Iſa. 28. 16. i.e. *not be aſhamed*, Rom. 9. 33. *haſte. the conſequent of ſhame.* menſæ remotæ. i.e. cænatum eſt. *Virg. in the ſweat of thy face ſhalt thou eat bread.* Gen. 3. 19. *ſweat for labour.* Stylus ille tuus multi ſudoris eſt. *Cic.* i.e. laboris.

A Synecdoche.

Synecdoche puts a word for another, becauſe the one *implies*, or is *implied* in the other; it is

Either 1. the *whole* for the *Part*, or the *Part* for the *whole*.

The *whole* &c. as *he drinketh up a River.* Job. 40. 23. i.e. *part of it.* fontem ferebat. *Virg.* i. e. aquam è fonte.

The *part* &c. as *the eye that mocketh his Father.* Prov. 30. 17. i.e. *the Son.* perjurum caput. i. e. homo. *Juven.*

Or 2. the *General* for the *Special*, or *it* for the *General*.

The *General* &c. *the Goſpel was preacht to every creature.* i.e. *man.* Coloſſ. 1. 23. *all the world to be taxed*, i.e. *the Roman Provinces.* Luc. 2. 1. pernicioſum animal; *or* perdidimus hominem. i.e. Catilinam. *Cic.*

The *Special* &c. as *many* for *all*; *many that ſleep in the duſt ſhall awake.* Dan. 12. 2. i.e. *all that are in the graves ſhall hear, and come forth.* John 5. 28. Orator inter multos prope ſingularis. *Cic.* mala multa precatus. *Horat.* i.e. omnes, omnia.

Hereto belongs, the *Plural* for the *Singular*, or it for the *Plural*.

Plural &c. *The Thieves caſt the ſame in his Teeth.* Matth. 27. 44. i.e. *one of them.* Luc. 23. 39. obtulimus quia nos ad prima pericula &c. *Ovid.* i.e. obtuli me.

Singular &c. *The Stork knoweth her time.* i.e. *the Storks.* Jer. 8. 7. otia miles agit. *Ovid.* i.e. milites.

An Ironie.

Ironie uſes a word in a *contrary* meaning; either *gently*, a Charientiſm. v. g. *walk in the ways of thy heart.* Eccleſ. 11. 9. i.e. *do not walk.* probe rem curaſti. *Ter.* i.e. malè.

Or *ſmartly.* a Sarcaſm, v. g. *cry aloud, for he is a God.* 1 King. 18. 27. I, fuge. *Mart.* i.e. poteris tutior eſſe domi.

There are alſo 4. AFFECTIONS (as Grammarians name them) belonging to every of the TROPES, eſpecially to the two firſt.

An HYPERBOLE, a CATACHRESIS, a METALEPSIS, an ALLEGORIE.

Hyperbole, *raiſes* or *depreſſes* the Trope beyond plain *truth.* It is, either Auxeſis; as *ſwifter than an Eagle.* 2 Sam. 1. 23. Ocyor euro. *Hor.* or Meioſis; as David calls himſelf a *dead dog.* 1 Sam. 24. 14. odi cane pejus. *Hor. they mount up to the heaven, they go down again to the depths.* Pſal. 107. 26. i.e. *very high, very low.* jamjam tacturos ſydera ſumma, jamjam tartara nigra putes. *Ovid.* an ample Metaphor.

Catachreſis, *abuſes* the Trope to an *uncouth* ſenſe; as *I turned to ſee the voice.* Rev. 1. 12. 1. 0. *the ſpeaker.* a hard Metonymie. vir gregis. i.e. aries. *Virg.* an abſurd Metaphor,

Metalepſis

Metalepsis, *comprises many* Tropes in *one* word; as *the City was mov'd*, i.e. *City for Jerusalem*. Syn. *Jerusalem for the people*. Metonym. invadunt urbem somno sepultam. *Virg.* Urbem i.e. Trojam. Syn. Trojam i.e. Trojanos. Metonym.

Allegorie, *multiplies* the Tropes in *several words*; as *hast thou cloathed his neck with thunder?* Job. 39. i.e. *made it terrible*, non loqui, & orare, sed (quod Periculi contigit) fulgurare, & tonare videtur, *Cic.* See larger Allegories; Cantic. c.4. v.1,2. c.5. v.10, 11. c.6. v.4,5. c.7. v.1,2. &c.

Horat. Od. 14 l.1. O navis, referunt in mare te novi Fluctus: O quid agis! fortiter occupa Portum &c.

A Scheme.

The *Scheme* alters not the signification, but enlightens and enlivens the composure of the words. It is two-fold.

A Scheme of *Repetition*, and a Scheme of *Construction*.

The former redoubles the word or sound, *emphatically*; the latter adorns the speech, *suasively*.

1. SCHEME of REPETITION; chiefly

Epizeuxis, *resumes* the word *immediately*; as *Saul, Saul.* Act. 9.4. Corydon. Corydon. *Virg.*

Diacope, *neerly*; as *they have hew'd them out Cisterns, broken cisterns.* Jerem. 2.13. divûm, inclementia divûm. *Virg.*

Polyptoton, *in 4 divers case*; as *of him, and through him, and to him* Rom. 11.36. arma armis, pede pes &c. *Virg.*

Ploce, repeats the *Proper Noun* as an *Appellative*; or

or the *word in a different ſenſe*; as Eſau ſpeaking of Jacob: *is not he rightly named Jacob?* Gen. 27. 36. i.e. *ſupplanter*. Memmius ad eum diem erat Memmius. *Cic.* i.e. ſui ſimilis. *let the dead bury the dead.* Matth. 8. 22. Suſtulit hic Matrem, ſuſtulit ille Patrem. *Mart.*

Epanalepſis, *begins* & *ends* the ſentence *alike*, as *rejoice in the Lord always; & again I ſay, rejoice.* Philip 4. 4. Quod pauperibus prodeſt, locupletibus æquè. *Horat.*

Anaphora, *begins* two or more clauſes *alike*; as Pſal. 29. *the voice of the Lord*, &c. v. 3. 4. 5. Paſcere crudelis noſtro Latona cruore; Paſcere. *Ovid.*

Epiſtrophe, *ends* two or more clauſes *alike*; as Amos 4. *yet have you not returned unto me, ſaith the Lord*, v. 8, 9, 10, 11. Quis legem tulit? Rullus. Quis populum ſuffragiis privavit? Rullus. Quis comitiis præfuit &c.? idem Rullus. *Cic.* de lege Agr.

Symploce, is Anaphora with Epiſtrophe; as Pſal. 136. *O give thanks unto the Lord, for his mercy endureth for ever*, v. 1, 2, 3.

Quàm bene Caune tuo poteram nurus eſſe parenti!
Quàm bene Caune meo poteras gener eſſe parenti! *Ov.*

Anadiploſis, *ends* the firſt and *begins* the ſecond clauſe; as Pſal. 122. *our feet ſhall ſtand within thy gates, O Jeruſalem.* v. 2. *Jeruſalem is builded.* &c. v. 3. Pierides, vos hæc facietis maxima Gallo; Gallo. *Virg.*

Climax, is a *redoubled* Anadiploſis, with *ſome change* of the word; as *tribulation worketh patience, & patience experience, & experience hope.* Rom. 5. 3. 4. Mars videt hanc, viſamq; cupit, potiturq; cupit. *Ovid.*

Epanodos, Anadiploſis *inverſed*, *reſumes* the members of the foregoing clauſe, *backward*; as *he that is of God heareth Gods words; ye therefore hear not, becauſe*

because your are not of God. Joh. 8.47.

Demophoon, ventis & verba & vela dedisti;

Vela queror reditu, verba carere fide. *Ovid.*

Crudelis mater magis an puer improbus ille?

Improbus ille puer, crudelis tu quoque mater. *Virg.*

Epanorthosis, a *correction* of the word, to *reinforce* the sense; as, *I live, yet not I, but Christ liveth in me.* Gal. 2.20. *Mon* est *vivere*, sed valere *vita. Mart.* filium habeo; ah quid dixi, habeo? imo habui, Chreme. *Ter.*

2. SCHEME of CONSTRUCTION; two-fold.

1. Scheme of *Passion.* 2. *Argumentation.*

SCHEME of PASSION:

Ecphonema, a *breaking out*, with *an Interjectional* Particle; as *O earth, earth, earth.* Jerem. 22.29. *oh the depth of the riches* &c. Rom. 11.33. O terra, o maria Neptuni! *Ter.*

Erotema, an *earnest question*; as *Men* and *Brethren what shall we do?* Act. 2.37. Quousque tandem Catilina, abutere patientiâ nostrâ? *Cic.*

Epiphonema, an *inference* upon what was said, *with admiration*; as (after recital of the zeal in believers.) *So mightily grew the word of God.* Act. 19.20. Thus (after the rehearsal of Æneas's travails.)

Tantæ molis erat Romanam condere Gentem. *Virg.*

Aposiopesis, an *imperfect Speech* that more aggravates, than the *perfect*; as *my Soul is also sore vexed, but thou, O Lord, how long?* Psal. 6.3. Quem quidem ego, si sensero, *Ter.*

Apostrophe, a *turning* or an *address* to the auditor, in the course of the Speech; as (*St. Paul* Act. 26. in his apology turns to Agrippa) *at mid-day O King.* v. 13. *whereupon, O King Agrippa.* v. 19. *King Agrippa, believ-*

vest

veſt thou the Prophets? v. 27. Thus Cicero (turning from the Judges to Cato) Aquo tandem, M. Cato, eſt æquius conſulem defendi, quam à Conſule? So (Virgil lib. 6. deſcribing the Heroes in Elyſium) Eheu quo trahitis, Fabii? Tu Maximus ille &c.

SCHEME of ARGUMENTATION: two-fold.

1. Saphenia. 2. Elenchus.

SAPHENIA *illuſtrates* the Argument; and is chiefly three-fold.

Proſopopeia, *repreſents a thing*, as it were a *Perſon*; as *doth not wiſdom cry? and underſtanding put forth her voice? ſhe ſtandeth in the top of high places, ſhe cryeth at the gates; unto you, O men, I call &c.* Prov. 8. 1, 2, 3, 4, *&c.* Tecum, Catilina, Patria ſic agit, & quodammodo tacita loquitur; nullum jam tot annos facinus extitit, niſi per te *&c. Cic.*

Hypotypoſis, *deſcribes* the Subject with lively *circumſtances*; as *the Daughters of Zion are haughty, and walk with ſtrecht forth necks, and wanton eyes; walking and mincing as they go, and making a tinkling with their feet &c.* Iſ. 2. 16. *&c.*

Sic ſedit, ſic culta fuit, ſic ſtamina nevit,
Injectæ collo ſic jacuere comæ. *Ovid.*

Epimone, is an *enlarging* upon the ſubject, as it were by a *gradual* encreaſe; as *who being in the forme of God, thought it no robbery to be equal with God; but made himſelf of no reputation, and took upon him the form of a ſervant, and was made in the likeneſs of men; and being found in faſhion as a man, he humbled himſelf and became obedient unto death, even the death of the croſs &c.* Phil. 2. v. 6, 7, 8, 9, 10, 11. Facinus eſt vincire Civem Romanum; ſcelus, verberare; parricidium; neca-

necare? quid dicam, in crucem tollere? *Cic.* ELENCHUS enforceth the argument many ways chiefly these.

Paralipsis [*Apophasis*, or *Reticentia*] argues strongly by way of *praeterition*; as *I do not say to thee how thou owest unto me even thine own self.* Philem. v. 19. non queror diminutionem vectigalium; flagitium hujus dam[illegible], praetermitto illa &c. *Cic.* de Lege Agr.

Prolepsis, *anticipates* the adversaries argument and *destroys* it; it has two parts: *Hypophora* the proposes the objection; as, *but some man will say, how are the dead raised up? and with what body do they come?* 1 Cor. 15. 35. *Anthypophora* answers the objection; *thou fool, that which thou sowest, is not quickned, except it dye,* v. 36, &c. Hypoph. Dicet aliquis, haec igitur est tua disciplina? sic tu instituis adolescentes? ob hanc causam tibi hunc puerum parens tradidit, ut in amore & voluptatibus &c. Anthyp. Ego, si quis (Judices) hoc robore animi fuit, ut respueret omnes voluptates, hunc divinis quibusdam bonis instructum atque ornatum puto &c. *Cic.* pro Cælio.

Here may be added a Prolepsis of another kind: Anticipation, or Hysterologia, a *preposterous placing* afore, what is to follow; as *he travelleth with iniquity, and hath conceived mischief.* Ps. 7. 14. Moriamur, & in media arma ruamus. *Virg.*

Diporesis *or* Aporia, a *distraction* for the *difficulty* of the Case; as *what thing shall I take to witness for thee? what thing shall I liken to thee, O Daughter of Jerusalem? what shall I equal to thee, that I may comfort thee, O Virgin Daughter of Zion?*

for

for thy breach is great like the Sea; who can heal thee? Lament. 2. 13. Equidem, quo me vertam, nescio. Negem fuisse illam infamiam judicii corrupti? negem &c. Non est nostri ingenii; vestri auxilii est, judices, hujus innocentiæ subvenire. *Cic.* pro Cluentio.

Epitrope, a *seeming concession* for the *greater conviction*; as *the King said unto him, Micaiah, shall we go against Ramoth Gilead to battel, or shall we forbear? and he answered him, go and prosper.* 1 King. 22. v. 15. but v. 17. *I saw all Israel scattered upon the hills, as sheep that have not a shepherd.* Habes, Tubero, quod est accusatori maximè optandum, confitentem reum, sed tamen hoc ita confitentem, se in eâ parte fuisse, quâ te, Tubero; quâ virum omni laude dignum, patrem tuum. Itaque priùs de vestro delicto confiteamini necesse est, quam Ligarii ullam culpam reprehendatis. *Cic.* Pro Ligario.

There are other kinds of Epitrope:

Paradiastole, a *distinguishing* of the Case, by way of *affirmation* and *negation*; as *we are troubled on every side, yet not distressed; we are perplexed, but not in despair; persecuted, but not forsaken; cast down, but not destroyed.* 2. Cor. 4. v. 8, 9.

Quid si fuscus Amyntas? Et nigræ violæ. *Virg.*

Non formosus erat, sed erat facundus Ulysses. *Ovid.*

Antimetabole, *inverts* the *antecedent* clause in the *consequent*; as *the Sabbath was made for man, not man for the Sabbath*; Marc. 2. 27. Non ut edam, vivo, sed ut vivam, edo. *Quint.*

Antitheton, uses *contraries* to *reenforce* the argument; as *on the right hand, and on the left; by honor and dishonor, by evil report and good report; as deceivers*

and

and yet true &c. 2 Cor. c. 6. v. 7, 8. &c. Æquitas, temperantia, fortitudo, prudentia, virtutes omnes certant cum iniquitate, cum luxuriâ, cum ignaviâ, cum temeritate, cum vitiis omnibus. *Cic.* 2 Cat.

Oxymoron, is an Antitheton that *quaintly* makes the *contraries to agree*; as *ſhe that liveth in pleaſure is dead while ſhe liveth.* 1 Tim. 5. 6.

Tu pol, ſi ſapis, quòd ſcis neſcis. *Ter.*
Non bene olet, qui bene ſemper olet. *Mart.*

Anacoinoſis an *invocation* of the Judges or Auditors *to juſtify* the caſe; as *And now, O inhabitants and men of Judah, judge I pray you betwixt me and my vineyard, what could have been done more.* &c. Iſa. 5. v. 3. Quæro abs te, C. Aquili, L. Luculle, P. Quintili, M. Marcelle. &c. controverſia de re pecuniaria recens intercedit &c. Quid eſt quod hac tandem de re vobis poſſit videri! profectò, ſi rectè veſtram bonitatem atque prudentiam cognovi, non multùm me fallit, ſi conſulamini, quid ſitis reſponſuri: primùm expectare, deinde ſi latitare &c. dici vix poteſt, quàm multa ſint, quæ reſpondeatis ante fieri oportere, quàm ad hanc rationem extremam devenire. *Cic.* pro P. Quin.

METRO-

METROLOGIE.

The measure of Syllables in reference to Meter.

Besides the construction or congruity of words rightly to *make* a Sentence, it is requisite to know the *Quantity* and *Accent* of Syllables rightly to *pronounce* it: Both which formerly mentioned are now properly to be taught; that having shewed the rules of *Prose*, we may here offer an Introduction to *Verse*.

A mention of Time or Quantity, Accent, and Verse was at first made to prepare the Learner; because no Prose can be pronounc't without some little notice of them; and also several examples to the rules are taken out of Poets.

Now because in this Part of Grammar, the English and Latin Rules do not so well correspond as in the other, it is necessary to teach them apart.

The English Metrologie.

Quantity of English Syllables might seem to agree with the Rule of the Latin, taught *pag.* 3. But as the Accent, not the Quantity, shews how to pronounce words in Greek Prose; so in English, it very much governs the measure of a Verse; and the Syllable, that has the Accent, is to be counted long.

Accent.

One Syllable in all words of all Languages has an Accent: which is not written in English: but here only, to exemplify the Syllable that should have it.

Monosyllables have an Acute; as *mán*, *foót*, *cár*, *-ríng*. Except the Signs and such Particles as cannot end a Verse. viz. *a*, *the*, *of*, *to*, *with*. &c.

Other words Accent the former Syllable; as *ánswer, bróther.*

So the Compound of two Monosyllable Nouns as *fóótman, eár-ring.*

All Particles (except *áfter, únder*) accent the latter Syllable; as *abóut, agáinst, anón, within:*

Likewise a Verb compounded with a *Particle*; as *abáte, beseém, declíne, outrún, suppóse, understánd.* And Pronouns with *self*; as *my sélf.*

Derivatives commonly keep the Accent of their Primitives; as *ánswerable, bróthérhood, rightéousness, schólarlike, abátement, understánding, kíngdom, lórdship, léarned, wíser,* &c. Except *áuditor, compétitor, distríbutor, inquísitor, órator,* &c. different to the Latin.

If the latter Syllable of the Latin Noun be wanting, the Accent falls back in the English; as *áttribute, cónfidence, émperor, óracle, philósophy,* &c.

Words of the same Letters usually vary their Accent, for distinction; as *to refúse, the réfuse.*

An English Verse.

Syllables by their Quantity make a Foot, the measure of a Verse. p. 3.

The English Feet consist of two, seldom three, Syllables.

The Verse has usually five Feet. pag. 4.

If words of more Syllables than one be in the Verse, they best make their last Syllable begin the Foot that follows; as

Religi | on like | a Pil | grim west | ward went. G. H.

Here obſerve that two Vowels, or a Vowel and a Diphthong coming together, are better contracted into one Syllable; the Engliſh Idiom ſeeming to uſe the Figure called *Synizeſis more frequently then the Latin; as

* See poetical Figures, pag. 145.

Then in | memo | rial of | his an | tient throne. G. H.

Many times Verſes are made with a final Syllable, or half foot; as

Come, my | way, my | truth, my | life. G. H.

That final Syllable, when the Accent and Rythm poſſeſſes the Syllable afore it, ſeems tautologous and redundant. v. g.

At length | to Ger | many | ſtill weſt | ward bend | ing;
And there | the Church | es feſt | ival | attend | ing.
G. H.

All other variety of Verſes have been exemplified by famous Poets of this Nurſery; viz.
B. Johnſon, A. Cowley, Divine *G. Herbert* &c.
The *Living*, in compliance to their modeſty, are not named.

Verſes of *divers kinds*; as theſe of four, three, two feet, and of one;

Lord Je | ſu! Thou | didſt bow
Thy dy | ing head | upon | the tree.
O be | not now
More dead | to me.
Lord, hear! ſhall he | that made | the ear
Not hear? G. H.

This ſhort Precept of an Engliſh Verſe ſerves to pleaſe and prepare the fancy of Children in their own Language, that they may with ſome eaſe be led on to the more ſerious endeavour of a Latin Verſe.

The Latin Metrologie

Explains. 1. The Accent and Quantity of Syllables.
2. The variety of Feet and Verses.

Accent.

The Latin Accent is seldom expreſt but for *diſtinction*, or *defect*.

Polyſyllables imply an *Acute*, in the third Syllable from the end; as *tópulus*: but in the ſecond, if it be long; as *multitúdo*. The Adverb has a *Grave* expreſt in the laſt, to diſtinguiſh it from the Noun; as *doctè*, *jerò*, *unà*, *bifariàm*, *herì*.

The *Circumflex* is uſed; either to diſtinguiſh the Ablative Singular of the firſt Declenſion from the Nominative, as *viâ*: Or to note the want of Letters;

1. In the Genitive Plural; as *cælicolûm* for *cælicolarum*, *deûm* for *deorum*. *Virg.*

2. In the third Perſon Plural of the Perfect Indicative, and throughout all Tenſes derived from it: i. e. when [*v*] conſonant between the Vowels is left out, and the two vowels are contracted into one; as *amârunt*, *amâſſent*; *nôrint*, *nôſſe*; for *amaverunt* &c.

Quantity or Time.

Vowels generally make the Syllables ſhort; eſpecially one afore another; as *labor*, *puer*. But *ſi* throughout makes [*i*] long; except *fierem*, *fieri*

Long

Long Syllables.

1. Long, by Nature.

A Dipthong; as *Oeneus*, *aut*, *haud*.

A contract Vowel, as *tibicen*, *Amathûs*, *cogo*, *amî*, *audîs*. But all vowels are ſhort afore a final [*t*]; as *audit*.

The Verb *do* makes only *da*, *das* long.

2. Long, by Poſition.

A Vowel afore a double conſonant; as *ex:* or afore two conſonants, in one word; as *abs:* or divided, in two; as *ab ſe*.

[*i*] between two vowels makes the former long; as *major*. *cujus*. *Caïus*.

And [*v*] for the moſt part; as *pavo*: but not [*u*] afore it; as *juvo*, *fluvius*.

Moſt of the Particular words excepted to the foregoing, or following rule, are put in a Catalogue, after the general Rules. pa. e 131.

Proper Names are to be collected by the obſerver and placed page. 136.

3. Long, by Uſe or Authority.

All Monoſyllables; as *lis*: And theſe Præpoſitives *ſe*, *ve*, *di*, *po*, *tra*. pag. 53, 54. Except words in *b*, *d*, *t*: and theſe *an*, *bis*, *cis*, *es*, *in*, *nec*, *per*, *quis*, *que*, *ter*, *ve*, *vel*; *is* the Pronoun, and *ne* the Interrogative.

[*i*] before or after [*r*]; as *miror*, *rideo*. Except the formative (*i*) as *ver-itas*, *nigerr-imus*, *febr-icito*, *puer-itia*: and the Præpoſitive *tri*; as *triceps*.

[*i*] before [*m*] in diſſyllables; as *limes*.

[*u*] before a conſonant for the moſt part. Except Polyſyllables in *-ulus*, *-ula*, *-ulum*; *-ulo*; *-uria*; *-urio*; as oculus, regula, ſeculum; nebulo, ambulo, centuria, parturio.

-Um, not cut off, is ſhort; as *circumago*.

Long, in the end.

An, as, es, os, i, u; as Titan; pietas, legas; nubes, leges, legeres; custos, frugi, cornu. Except *-es* encreasing in *-itis*; as *miles, -itis*. *Es* not encreasing becomes short in the Ablative; as *nubĕ*; but *fames* keeps *e* long; as *famē*. *Virg.*

Greek words are short in *-as, adis*; as lampas: in *os*; as Atropos. *Stat.* Genitives in *-os*, Vocatives in *i*; as Typhoëos. *Ovid.* Pallados. *Mart.* Amarylli. *Virg.* Pari. *Ovid.* rarely Datives in *i*; as Palladi. *Stat.* Minoïdi. *Catul.* In *-es, -as*, Plural; as, Belides, Troas *Ovid.*

A vowel is long afore [*c*]; as *halec, illic.*

En, -enis; *in* or *is, -inis*; as *lien, Salamis, delphin.*

Us, -udis, -uris, -utis; as *incus, tellus, salus.*

[*A*] in the Ablative; as *viâ*: in Particles; as *contra*.

[*O*] [*is*] in the Dative and Ablative; as *regno, -is*; and *-lis* in the Potential; as *velis*, Also *gratìs*.

Adverbs in [*ò*]; as *ultrò*: and also in [*è*] from Adjectives in *us* and *er*; as *pulcrè*.

Long, the last Syllable but one.

A before *-tor*, as *Senator*.

Any Vowel afore these final Syllables:

Da-ma, culi-na, state-ra, auri-ga, cloa-ca, loque-la,
Vi-ta, rube-do, pena-tes, vi-tis, aga-so, lupa-nar,
Do-num, querce-tum, fi-lum, manti-le, cana-lis,
Fi-nis, re-mus, ahe-nus, ava-rus, na-sus, avi-tus,
La-bes, compa-ges, se-des, sta-men. Simul in *-go*,
Aut-*re, -ris*, aut-*mentum*, *Polysyllabon*. *Aclyton* in-*tim*.

Except Adjectives of more than two Syllables in *-imus*; as septimus: Verbals in *-ilis*; as fertilis: in *-itus*, from the Supine in *-ĭtum*; as monitus. Adverbs in *itus*; as funditus. Also Adjectives material in *-inus* rather Greek; as faginus, adamantinus.

The

The final long vowel keeps its quantity with the encreaſe; as *pietas, -atis*; *quies, -etis*; *cuſtos, -odis*; *pax, pacis*; *lex, legis*; *cervix, -icis*; *celox, -ocis*. *-ei* of the fift Declenſion after (*i*); as *dies, -iēi*. Except:

1°. A vowel afore two conſonants, becomes ſhort; afore one; as *mamma, māmilla*; *Signum, sĭgillum*; *far farris, fărina*; *hyems, hyĕmis*; *princeps, -ĭpis*; *anceps -ĭpis*. alſo *-ex, -icis*; as *vertex, -ĭcis*. *plebs* makes *plēbis*.

2°. The heſe particulars make their long vowel ſhort;

Sāl, sălis. Lār, pār, -ăris. Mās, măris. vās, vădis. Pēs, pĕdis. abiēs, ariēs, pariēs, -ĕtis. Bōs, bŏvis. So Jŏvis. Compos, impos, -ŏtis. Fax, -ăcis. nex, nĕcis. grex, grĕgis. remex, -ĭgis. Appendix, calix, coxendix, filix, fornix, hiſtrix, larix, pix, ſalix, varix, -ĭcis. Nix, -nĭvis. Cappadox, præcox, -ŏcis. Allobrox, -ŏgis, Crux, dux, nux, trux, -ŭcis. Conjux, -ŭgis.

The final ſhort vowel encreaſes long in Genitives:

1. maſculines in *ŏr, -ōris*; as *honŏr, -ōris*. except *memor, -ŏris*.

2. Neuters in *ăl, -ālis*; *ăr, -āris*; as *animăl, -ālis*; *calcăr, -āris*. And Comparatives in *-ŭs -ōris*; as *meliŭs, -ōris*. But *jubăr, -ăris*.

O is made long in *-onis*; as *ſermo, dictio, -ōnis*. Except Nationals; as *Macedo, Saxo, -ŏnis*.

The Plural *a, o*, of the firſt and ſecond Declenſion are long; as *G. viārum, librōrum*. D. Ab. *deābus, duōbus*. So [*æ*] of the Dipthong [*æ*] reſolved, as *pictāi Virg.*

The firſt vowel in the *Perfect* and *Supine of two Syllables* is long; as fodio, fodi; rumpo, rupi; cado, caſum. Except *ſix perfects* bibi, dedi, fidi, ſcidi, ſteti, tuli: *ten Supines* datum, itum, litum, quitum,

quitum, ratum, rutum, ſatum, fitum, ſtatum; and citum from *cieo*.

Verbs of two Syllables, that loſe a conſonant in the Perfect made triſyllable, ſhorten the vowel afore it; as *diſco, didici; pello, pepuli*: add here *sŏlutum, vŏlutum*.

A, and *o* of the Verb encreaſing, is long; as *legāmus, legitōte*: Likewiſe [*e*] afore *-bam*. and in the plurals, *-ēmus, -ētis; ērunt, -ēre*.

Syllables ſhort or long.

A ſhort vowel is made common, before *a mute* varied with *a liquid*, chiefly [*r*]; as *patris* from *pater*. Sometimes afore the variation; as *lucrum, retrò*. *Virg.*

Many in Greek; as Atlas, *Ovid.* cygnus, Cyclops. *Virg.*

[*o*] in the firſt caſe, chiefly beginning a foot; as *ſermo, ego, lego*: So the Imperative in *-to*, and the Gerund in *-do*; as *legito, legendo*. Likewiſe [*i*] in the latter Syllable of theſe; *mihi, tibi, ſibi, ibi, ubi, utì*.

[*a*] final in *-ginta*; as *ſexagintă, ā. Mart.* And [*ĭ*] in the future Potential; as *dixerĭs. Horat. dederĭs. dederĭtis, viderĭtis. Ovid.*

Particulars; hic the Article; cor, fel, mel, compos, impos; ambo, duo, octo; citò, imò. modò, quandò, pol, ſerò, ergo; fac, cavè, putà, vidè, noſtin', viden',

Others have [*e*] of the third Conjugation ſhort in the Imperative and the Infinitive, as if they were of the firſt Conj. *viz.* reſpondĕ *Mart.* See pag. 42.

Genitives in *-ius*; as *illĭus. Ovid. illĭus. Virg.* Theſe two *alterĭus* and *utrĭuſque* are always ſhort.

The Præpoſitive [*re*] in *rejicio*, is ſometimes ſhort though [*i*] come between two vowels; as tela manu rejicit. *Stat.* In *refert* the Imperſonal, long; in the Perſonal, ſhort. *Virg.*

A Dipthong, ſpecially, *æ* afore a vowel is ſometimes ſhort; as vila Mæo; its hyems, *Ovid.*

Deri-

Derivatives

Keep the quantity of their Primitives.

1. Nominals.

From the Nominative; as lāna, lāneus; nubēs, nubēcula. From the Genitive; as cenſor,-ōris, cenſōrius; cornix,-īcis, cornīcor; augur,-ŭris; augŭror. So the vicarious Vowel; as funŭs-ĕris-ĕreus, corpŭs-ŏris-ŏreus.

2. Verbals.

From the Preſent; as nūbo, nūbilis; lătĕo, lătĭbulum; ſpĕcĭo, ſpĕcĭmen; but vĕrĕor vĕrĕcundus.

From the Perfect; as dŏcŭi, dŏcŭmentum.

From the Supine: The vowel afore-*tum* keeps its quantity; as ſpectā-tum,-tus,-tor,-bilis,-bundus,-culum,-men,-tio: venā-tum,-bulum,-ticus.

The third vowel from the end is commonly long in ſuch terminations:

-abulum,	acetabulum	*-ecula,*	plebecula.
-aceus,	vinaceus.	*-edula,*	monedula.
-aceum,	muſtaceum.	*-elia,*	fidelia.
-aculus-a-ū	vernaculus.	*-eſimus,*	centeſimus.
-aginta,	ſexaginta.	*-icula,*	craticula.
-agulum,	ſtragulum.	*-titius* Verb.	ſuppoſititius.
-aneus,-a	araneus-a	*-olium,*	capitolium.
-arius,	librarius.	*-oneus,*	idoneus.
-arium,	granarium.	*-onius,*	favonius.
-aſius,	amaſius.	*-onia,*	ciconia.
-aſium,	colocaſium.	*-onium,*	patrimonium
-atium,	palatium.	*-orium,*	tentorium.
-aticus,	fanaticus.	*-otium,*	repotium.
-aticum,	viaticum.	*-ulium,*	peculium.
-atilis,	aquatilis.	*-ōcĭnium,*	patrocinium.

Words

Words derived from the Greek make [a] short for [e] long in the end; as famă, poetă: likewise *or* short for the Greek long; as rhe[illegible]

Er long making [e] short in the Greek Genitive is short also in the Latin Nominative; as matĕr. Except aēr, æthēr, -ĕris. *Virg.*

Here note the quantity of [e] or [o] in Greek words is exprest by distinct characters; which the Latin having not, their quantity is to be known by the original; as N. Arctŏs. *Stat.* Chaŏs. *Ovid.* Androgeōs. Herōs. *Virg.* N. G. cratēr, -ēris: aēr, -ĕris. *Virg.* Telamon, -ōnis: Memnon, ŏnis. *Ovid.*

Compounds

Have the quantity of their Components; as cădo, occĭdo; cædo, occīdo. Sodes for si audes. Dies espĭter from dies and păter.

These obsolete simple verbs have their first vowel long in the compounds; *-clino, -fligo, -fragor, -futo, -pilo, -sidero* &c.

The last vowel of the first Component is rather short as Lucĭfer, quadrĭjugis, trĭvia, æviternus, sanguinŏlentus, diuturnus, lutŭlentus; hŏdie, sĭquidem. So these losing a consonant, ăperio, ŏmitto, ŏperio. Some retain the long; as venēficus.

In Composition, *facio* keeps [e] of the 3d Conj. afore it, long; as thura liquēfaciunt. *Ovid.* but *feci* &c. make the [e] short; as tepĕfecerat hastam. *Ovid.*

De, præ, before [h] or a vowel, are short; as dehisco, præustus. *Virg.* *Ne* in such; as nefas, nequeo. &c.

Particular Words.

Many words of the same letters have a different quantity with different significations; as pŏpulus *people*, pōpulus *a poplar*. pălūs *a marsh*, pālŭs *a stake*. mālus, māla, mālum *Subst.* mălus, -a, -um *Adj.* ambĭtus *Subst.* ambĭtus *Particip.* īdem *Masc.* īdem *Neut.* Dīcō -is, dĭco -as: lĕgo-is, lēgo-as, cŏlo -is, cōlo-as. edūco -is, edŭco -as.

Many Greek words change the quantity in Latin; as geŏmetres, līnum, Oedipūs, pōlypŭs, rhēda. &c.

Par-

Particular words that have long Syllables not included in the foregoing Rules.

A long.

Acer. *Adj.* alea. amāracus. ames. area. areo. ariolor. ater. Balæna. baliſta. balo. baro. baſium. blatero. brachium. Caduceus. caligo. calo. carex. carica. caſeus. cicada. clamo. contagium. contamino. crapula. Fabula. facundus. fagus. flagitium. flagito. fragum. frater. Ganeo. glarea. Halec. halo. Janua. Labor *verb.* lamentor. lamĭna. lanugo. laterna. Maceries. macero. machĭna. māgālia. manè. manes. mano. mapālia. materia. maturus. matuta. meracus. Omaſum. opacus. Paca. pagĭna. pagus. palor. papilio. pareo. placo. præſagio. proſapia. Qualus. quatuor. Radix. ramex. rapum. Saga. ſaperda. ſcapus. ſpadix. ſqualor. ſtaturus. ſuadeo. Tabi. talea. talus. tiaras. tragula. trames. Vagina. vagio. vapulo.

E long.

Celo. cepa. cēpe. ceritus. ceruſſa. clemens. creber. cupediæ. Demum. denique. dēterior. dicterium. Felix. feralis. feriæ. Gleba. Lethum. leno. Metior. metor. Nequam. Penè. penula. penūria. pero. prelum. Regula. repo. reſina. rete. Sebum. ſeculum. ſecius. ſedulus. ſemita. ſepes. ſepia. ſeria. ſerius. ſericus. ſetinum. ſpelunca. ſpero. ſplenium. ſtrenuus. Teda. tegula. tēmētum. temo. teter. theſaurus. Veles. velo. velox. veneo. venor. verēdus. vēſica. vindemia. volemum. And the præpoſitive *ſemi-*

I long.

I long.

Amicus. antiquus. Clitellæ. conviciuni. crocodilus. Dito. Faſtidio. faſtigium. feſtino. fibula. ficus. fidus. figo. filius. Hibernus. Ibīdem. ico. idus. ilex. ilia. Lacinia. liber *Adject.* liberī. libo. libum. licium. filium. linea. liquor *Verb.* litĕra. Mendicus. milia. multitia. Nidor. nidus. nitella. nitor *Verb.* novitius. Obliquus. obſtipus. omnino. opimus. opinor. Pedículus. picus. pileum. pituita. poſticus. pudicus. Renideo. Sībilus. ſidus. ſimia. ſpiculum. ſtipes. ſtipo. Tibia. triduum. Ubique. veſtigium. vectigal. vibex. viburnum. vicus. viginti. vicies &c. vinea. vipera. vito. umbilīcus.

O long.

Adorea. alioqui. Bóletus. Codex. comis. como conor. copa. copia. copula. coram. Deſolo. dolium. donec. dono. Fomes. Gloria. gobio. Ignoro. Locuſta. lodix. loligo. lorica. lorum. Moles. molior. morio. Nodus. Obex. olim. opilio. oro. otium. Ploro. poculum. podex. pomum. ponè. pono. poto. procerus. proles. promo. proſa. Quandoque. Robur. Scopa. ſcrofa. ſolennis. ſolers. ſolor. ſolus. ſopio. ſorex. Tophus. Vomer.

V long.

Curia. Ligurio. Prurio. Scaturio. Uva. uvidus.

Particular

Particular words that have ſhort Syllables contrary to the foregoing Rules.

A ſhort.

Anus,-ûs. avena. aveo. avis. avus. Baculus. barbarus. Cado. calamus. cammarus. canis. carbaſus. caſtanea. catus. caveo. cavus. cavilla. cerafus. Faveo. favilla. favus. Galbanus. gravis. Hara. hilaris. Ita. Laganum. hrus,-eris. lavo. Manus. mare. Paveo. platanus. Quia. Ratis. Saganum. ſalum. ſatis. ſpado. ſparus. ſtatim. Tamen.

E Short.

Benè. brevis. Cedò. creperus. cŭmera. Dejĕro. Edo *ſimpl.* Ferus. fretum. Gena. genus. Hebenus. hebes. hedera, herus,-a. hŭmerus. Impetus. juvenis. Levis. Malè. merus. metus. Nemus. nŭmerus. Opera. Patera. penus. pejĕro. penès. phaleræ. præpes. Seges. ſelibra. ſera. sĕvērus. ſtreperus. Teges. teres. tenus. Veges. veſpera. vetus. ŭterus.

I Short.

Acinus. agnitus. alica. amita. animus. apinæ. aridus. aſinus. Braſſica. buccina. Caliga. cinis. circinus. cognitus. cophinus. Dicax. -dicus. dirimo. diſertus. dividō. dominus. Fabrica. facinus, fæmina. fides. fimus. fiſcina. fraxinus. frico. fritillus. fŭllica. fuſcina. Geminus. gracilis. gratuitus. Halitus. hirudo. hirundo. hŭmilis. lubricus. luridus. Manica. mantica. mina-æ. Navita. nihilum. niſi. nundinum. Orbita. Pampinus. parilis. patina. pedica. pertica. petimen. praſinus. Quaſi. quĭrites. Rigeo. rigo. Sarcina. ſcŭtica. ſemita. ſimila. ſimilis. ſimul.

ſinus

ſinus. ſterilis. ſtrigilis. Tegimen. terminus. tribulus. tribunal. tribus. trŭtina. tŭnica. Vireo. Vomica.

O Short.

Bonus. Domus. Foveo. fovea. Mola. mora. moveo. Nota. novacula. novem. noverca. novus. Onus. ovis. ovo. Procella. profanus. profari. profectò. profeſtus. proficiſcor. profiteor. profugus. profundus. pronepos. protervus. Rota. Solum. ſonus. Totus. Voveo.

V Short.

Arbutus. autŭmo. Bubulcus. Camurus. coluber. columen. crumena. cubo. cubitus. cucullus. cucutta. cucumis. cucurbita. culex. culina. culullus. cuminum. cumulus. cuneus. caniculus. cupio. cupreſſus. cŭrulis. cutis. Defrutum. dubius. dubito. Frutex. fuga, -o, -io. furo. furŭrus. Guberno. Humus. Incolumis. innuba. juba. jubar. jubeo. jugum. jugulum. Lemures. lubet. lucellum. lucerna. lupus. lupanar. lupatum. lutulu *carnum*. Mulier. mutilus. Numiſma. nuncupo. nurus. Occupo. Petulans. pluteus. pronubo. pudet. pudor. pugil. pugillus. pumilus. purpura. puſillus. putamen. puteal. puteus. puto. Repudium. rubeo. rubus. rudens. rudis. rumex. rutilus. Saturo. ſcutula. ſpurius. ſtudeo. ſtupeo. ſubitus. ſubulcus. ſudes. ſupellex. ſuper, -i, -o. ſupinus. ſuſurrus. Tubo. tripudio. trucido. tuba. tubus. tudes. turuncum. tumeo. tumulus. tumultus. Ubi. vitupero. volucer. ululo. ulula. upupa. uter. utrì. utinam. tuli. Plural *-ubus, -umus*; as arcubus. ſumus.

Poetical

Poetical Licence

Lengthens a ſhort Syllable between two long; as Imbēcillus. *Hor.* Matricida. *Auſon.*

When many ſhort Syllables come together, Licence makes the firſt or ſecond long; as ſtrigilibus. *Juven.* canīcula. *Perſ.* lemūria. *Ovid.*

Licence varies the quantity from the common Rules in particular words; as the mark ſhews in theſe: Apŭlus. Apūlia. ăpūlia. *Horat.* connūbia, connŭbium. *Virg.* cōrălium. *Ovid.* cŏrălia. *Claud.* cŏturnix. *Ovid.* cōturnix. *Lucret.* cĭcūlus. *Horat.* cĭcŭlus. *Ovid.* ferē. *Virg.* ferĕ. *Auſon.* ficēdula. *Juven.* ficĕdula. *Mart.* fōcale. *Mart.* fŏcale. *Hor.* fortuĭtus. *Manil.* fortuītus. *Hor.* līqueſco, līqueſco. *Ovid.* ōhe, ŏhe. *Hor.* palūs. *Virg.* palŭs. *Hor.* prōcuro. *Virg.* prŏcuro. *Tibul.* prōfundo. *Catul.* prŏfundo. *Ovid.* prōpago, prŏpago-as. *Lucret.* prōpago, prŏpago-inis. *Virg.* prōpello. *Propert.* prŏpello. *Lucr.* pūpa. *Perſ.* pŭpa. *Auſon.* quōtĭdianus. *Catul.* quŏtidianus. *Mart.* rūbigo. *Virg.* rŭbigo. *Mart.* ſōpitus. *Virg.* ſemiſŏpitus. *Ovid.* vīr, vĭr. *Ovid.*

Here

Here may be placed *Proper Names* of invariable quantity, eſpecially ſuch as differ from the foregoing Rules.

	A	E	I	O	U
Long	Saturnus.	Cethegus.	Silius.	Clodius.	Amulius.
	Thais.	Lucretia.	Eliſa.	Flora.	Julia.
Short	Marius.	Rhemus.	Titus.	Ovidius.	Numa.
	Camilla.	Venus.	Sibylla.	Corinna.	Furia

Metrical

Metrical Feet.

Time is the meaſure of a Syllable. The ſhort Syllable has one meaſure or time; the long, two. Syllables make a *foot*, the meaſure of a verſe. *pag.* 3.

A foot is firſt *Simple*, of two Syllables: ſecondly *Compound*; which is two-fold: 1. Of a ſimple foot and half, called *Triſyllable*. 2. Of two feet; whereof there are three ſorts: The firſt conſiſts of two ſimple feet; which make a *Tetraſyllable*. The next, of a Diſſyllable and Triſyllable, which make a *Pentaſyllable*. The laſt, of two Triſyllable feet, which make an *Hexaſyllable*.

The Feet are named. 1. from the meaſure; as *Tribrachy*. 2. from the quality; as *Trochee*. 3. from the Author; as *Pyrrichie*. 4. from the People or Nation that uſed it; as *Cretic*. 5. from the Sacrifice at which it was uſed; as *Spondée*. 6. from the God to whom it was uſed; as *Bacchée*. 7. from the contrariety; as *Antibacchée*.

The quantity of the Syllables in the ſeveral feet is repreſented in five Tables following, throughout which the oppoſite feet are rank't together by pares; only the third Table has an oppoſite quaternion.

1. *Tab.* The Diſſyllable Feet are four.

Two *Primitives*; each, of two like Syllables; as 1. ⏑ ⏑ Two ſhort; Rhea: called a *Pyrrichie* from the nimble dance of Pyrrhus, Son of Achilles; uſed in memory of his firſt leaping out of the Trojan horſe. *Heph. Schol.* p. 81. It is called alſo *Hegemon*. i.e. the principal or original foot: And *Pariamb*, being uſed in the end of a Verſe for an *Iambic*: and from its meaſure, *Dibrachy*.

2. – – Two long; Mavors: called a *Spondèi.* A grave foot uſed at the Sacrifices.

Two *Derivatives*, of unlike Syllables; the halves of the Primitives; as

3. ⏑ – A ſhort and long; Pelops: an *Iambit.* It begins light, and falls heavy.

4. – ⏑ A long and ſhort; Roma: a *Trochee.* *i.e.* a running foot that goes off light: called alſo *Chorius*, by *Terentianus.*

2. *Tab.* The Triſyllables are eight.

1. ⏑⏑⏑ Three ſhort; Helena: a *Tribrach.* i.e. a Pyrrichie and a half. It is called, ſpecially in compoſition, *Chorêus*; as it were a tripping foot: ⏑⏑⏑ being equal to – ⏑.

2. – – – Three long; Ænéas: a *Moloſſus.* i.e. a Spondée and a half. A ſlow foot uſed by Moloſſus, Son of Pyrrhus and Andromache. in hymns ſung in the Temple of Dodona. *Heph. Scholiaſt.* p. 82. called alſo *Canius. Diomed.* chiefly in compoſition; as it were from *Canon*, the ruling or ſteady foot: and from its meaſure, *Trimacer.*

3. – ⏑⏑ A long and two ſhort; Cynthia: a *Dactyl.* i.e. a Trochee and half a Pyrrichie: called from Dactylus a *finger*, conſiſting of three joynts, the firſt the longer. Uſed alſo by the Dactyli Prieſts of Cybele.

4. ⏑⏑ – Two ſhort and a long; Boreas: an *Anapeſt.* i.e. a Pyrrichie and half a Spondée. It is a Dactyl revers'd.

5. ⏑ – – One ſhort afore two long; Achilles: a *Bacchèe* i.e. an Iambic and half a Spondée; uſed in the Orgies of Bacchus.

6.

6. – ⏑ Two long afore one ſhort; Lucina: a *Palimbacchée* or *Antibacchée*, contrary to the Bacchée. i.e. a Spondée and half Pyrrichie: called commonly in compoſition *Latius* (*Diomed.*) from Latium; uſed there in the Bacchanals.

7. ⏑ – ⏑ One long between two ſhort; Diana: a *Scolius*. i.e. Iambic and half Pyrrichie. Called ſo, as being uſed to the cornet or oblique inſtrument: or from the interchangeable Antiphones of Singers in divers ſtations: but from its meaſure, *Amphibrachy*.

8. ⏑ – One ſhort between two long; Hercules: a *Cretic*. i.e. a Trochee and half Spondee. A foot uſed by the Cretians: called from the meaſure, *Amphimacer*.

3. *Tab.* The Tetraſyllables ſixteen.

1. ⏑⏑⏑⏑ Ovidius: a *Proceleusmatic*. i.e. Dipyrrichie. A ſwift foot; as the *word* in charge at Sea, or in the Camp.
2. – – – – Amphitrite: a *Diſpondée*.
3. ⏑ – ⏑ – Themiſtocles: a *Dijamb*.
4. – ⏑ – ⏑ Martialis: a *Ditrochée*, or *Dichorie*.
5. – ⏑⏑ – Androgeôs: a *Choriamb*.
6. ⏑ – – ⏑ Alexander: an *Antiſpaſt*; i.e. *Iambochorie*, or a Choriamb inverſt.
7. ⏑⏑ – – Epimetheûs: an *Ionic the leſs*. i.e. *Pyrrichio-ſpondée*.
8. – – ⏑⏑ Lucretius: an *Ionic the greater*. i.e. *Spondêo-pyrrichie*. Both feet, the former and this, uſed by the Iônes.

Four Pæons: called Pentaſems, i.e. one long and three ſhort, æqual to five ſhort.

9. −⏑⏑⏑ Virgilius. 1ſt. *Pæon.* i.e. *Trochæo pyrrichio.*
10. ⏑−⏑⏑ Horatius. 2d. *Pæon.* i.e. *Iambo-pyrrichio.*
11. ⏑⏑−⏑ Epicurus. 3d. *Pæon.* i.e. *Pyrrichio-trochæo.*
12. ⏑⏑⏑− Diogenes. 4th. *Pæon.* i.e. *Pyrrichio-iambico.*

The Pæons were uſed in the Hymns to Apollo; named alſo Pæans by the Ancients.

Four Epitrites: called Heptaſems, i.e. one ſhort Syllable to three long, æqual to ſeven ſhort.

13. ⏑−−− Ariſtides. 1ſt *Ep.* i.e. *Iambo-ſpondee.*
14. −⏑−− Dindyméne. 2d. *Ep.* i.e. *Trochæo ſpondee.*
15. −−⏑− Demoſthenes. 3d. *Ep.* i.e. *Spondæo-iambic.*
16. −−−⏑ Conſtantínus. 4th. *Ep.* i.e. *Spondæo-trochee.*

4. *Tab.* The Pentaſyllables, thirty two.

1. ⏑⏑⏑⏑⏑ Sibi ſapere. *Pyrrichio-tribrachy.*

Named *Orthius* [i.e. rectus] from the æqual, ſublime and treble Syllables.

2. −−−−− Bos eſt in linguâ. *Spondæo-moloſſus.*
3. −⏑⏑⏑⏑ Cæna dubia. *Trochæo-chorëus.*

called *Promacer*, the firſt long the reſt ſhort: or *Parapæon* i.e. not a true Pæon, having a ſhort Syllable too much in the end.

4. ⏑−−−− Voluptas Siren. *Iambo-canius.*

or *Prebrachy*, the firſt ſhort the reſt long.

5. ⏑−⏑⏑⏑ Bonis avibus. *Iambo-chorëus.*

or *Periamb* æqual to Dijamb; the laſt ⏑⏑⏑ to ⏑−.

6. −⏑−−− Copiæ cornu. *Trochæo-canius.*

or *Hyperbrachy*, the ſhort put over the firſt long.

7. ⏑⏑−⏑⏑ Gygis annulus. *Hegemo-dactylus.*

or *Meſomacer*, a long in the middle of four ſhort.

8. −−⏑−− Communis Hermes. *Spondæo-bacchëus.*

or *Meſobrachy*, a ſhort in the middle of four long.

9.

9. ⏑⏑⏑–⏑ Deus ubique. *Hegemo-ſcolius.*
10. –––⏑– Aures Atticæ. *Spondêo-creticus.*
11. ⏑⏑⏑⏑– Deus amor eſt. *Pyrrichio-anapæſtus.*
or *Hypomacer*, a long after four ſhort.
12. ––––⏑ Crambe bis cocta. *Spondêo-latius.*
or *Hypobrachy*, a ſhort after four long.
13. ––⏑⏑⏑ Surdo canere. *Spondêo-chorêus.*
or *Symplectus*, a compact foot made of the greateſt diſſyllable and leaſt triſyllable.
14. ⏑⏑––– Aſinum tondes. *Hegemo-canius.*
or *Diphyes*, a foot of different kinds, the leaſt diſſyllable and greateſt triſyllable.
15. ⏑––⏑⏑ Fides Punica. *Iambo-dactylus.*
16. –⏑⏑–– Meſſis in herbâ. *Chorio-bacchêus.*
17. ⏑⏑––⏑ Hecates cæna. *Hegemo-latius.*
or *Muſicus*, named as it ſeems from the pleaſantneſs of its meaſure.
18. ––⏑⏑– Contra ſtimulos. *Spondêo-anapæſtus.*
or *Amœbæus*, from the return of the Anapeſt, equal to the Spondée.
19. ⏑⏑⏑–– Canis in ollâ. *Hegemo-bacchêus.*
or *Daſius*, i.e. cloſe or ſteady; from the bacchée, a ſtable foot after the ſwift Pyrrichie.
20. –––⏑⏑ Terræ filius. *Spondêo-dactylus.*
21. –⏑–⏑⏑ Polypi caput. *Chorio-dactylus.*
22. ⏑–⏑–– Equi ſenectus. *Iambo-bacchêus.*
or *Periambodes*, from the long ſyllable added in the end to the Dijamb.
23. ⏑–⏑–⏑ Achillis haſta. *Iambo-ſcolius.*
or *Periodicus*, from the ſhort ſyllable, firſt, middle and laſt, as in *a round.*
24. –⏑–⏑– Alter Hercules. *Trochæo-creticus.*
or *Antiperiodicus*, contrary to the Periodic.

25.

25. ⏑⏑–⏑– Laterem lavas. *Hegemo-creticus.*
26. ––⏑–⏑ Calvus, comatus. *Spondêo-ſcolius.*
27. ⏑–⏑⏑– Columba ſedens. *Iambo-anapæſtus.*
or *Cyprius*, uſed in the ſoft layes of Cyprus.
28. –⏑––⏑ Mutus ut piſcis. *Trochæo-latius.*
or *Anticyprius*, contrary to the Cyprius.
29. –⏑⏑–⏑ Aureus hamus. *Trochæo-ſcolius.*
or *Doriſcus*, uſed by the Dores.
30. ⏑––⏑– Scit uti foro. *Iambo-creticus.*
called *Dochimus* by Cicero. A foot much *eſteemed* and uſed by the Orators in the cloſe: but called by the Grammarians rather *Dochmius.*
31. –⏑⏑⏑– Præter oleas. *Trochæo-anapæſtus.*
or *Strophius*, from the inverſion of the ſyllable; the firſt foot ends, the next begins, with a ſhort ſyllable.
32. ⏑–––⏑ Charontis cymba. *Iambo-latius.*
or *Antiſtrophius*, contrary to the Strophius.

5. *Tab.* The Hexaſyllables, ſixty four.

1. ⏑⏑⏑⏑⏑⏑ Homo Sibi deus. *Dichorêus.*
2. –––––– Veni, vidi, vici. *Dicanius.*
3. –⏑⏑⏑⏑⏑ Subere levior. *Dactylo-chorêus.*
4. ⏑––––– Honos mutat mores. *Bacchêo-canius.*
5. ⏑–⏑⏑⏑⏑ Lari ſacrificat. *Scolio-chorêus.*
6. –⏑–––– Mortui non mordent. *Cretico-canius.*
7. ⏑⏑–⏑⏑⏑ Lapidi loqueris. *Anapæſto-chorêus.*
8. ––⏑––– Regum manus longæ. *Latio-canius.*
9. ⏑⏑⏑–⏑⏑ Aſinus ad lyram. *Chorêo-dactylus.*
10. –––⏑–– Ad Græcas Calendas. *Canio-bacchêus.*
11. ⏑⏑⏑⏑–⏑ Ede, bibe, lude. *Chorêo-ſcolius.*
12. ––––⏑– In vino veritas. *Canio-creticus.*
13. ⏑⏑⏑⏑⏑– Sapere patruos. *Chorêo-anapæſtus.*

14. ------⏑ Clavus clavum pellit. *Canio-latius.*
15. --⏑⏑⏑⏑ Muſas cole, puer. *Latio chorêus.*
16. ⏑⏑----- Canis in præſepi. *Anapæſto-canius.*
17. ⏑--⏑⏑⏑ Sibyllæ folia. *Bacchêo-chorêus.*
18. -⏑⏑--- Ludere par impar. *Dactylo-canius.*
19. ⏑⏑--⏑⏑ Oleum perdere. *Anapæſto-dactylus.*
20. --⏑⏑-- Poſt funera virtus. *Latio-bacchêus.*
21. ⏑⏑⏑--⏑ Facit apis mella. *Chorêo-latius.*
22. ---⏑⏑- Fronti nulla fides. *Canio-anapæſtus.*
23. ⏑⏑⏑⏑-- Honor alit artes. *Chorêo-bacchêus.*
24. ----⏑⏑ Davus non Oedipus. *Canio-dactylus.*
25. -⏑-⏑⏑⏑ Delphicus gladius. *Cretico-chorêus.*
26. ⏑-⏑--- Olêre paſtillos. *Scolio-canius.*
27. ⏑-⏑-⏑⏑ Manus manum fricat. *Scolio-dactylus.*
28. -⏑-⏑-- Pro focis & aris. *Cretico-bacchêus.*
29. ⏑⏑-⏑-⏑ Pelopis talenta. *Anapæſto-ſcolius.*
30. --⏑-⏑- Currus trahit boves. *Latio-creticus.*
31. ⏑⏑⏑-⏑- Animus in pedes. *Chorêo-creticus.*
32. ---⏑-⏑ Tithoni ſenecta. *Canio-ſcolius.*
33. -⏑⏑-⏑⏑ Ante pilos ſapit. *Didactylus.*
34. ⏑--⏑-- Ineſt ira muſcæ. *Dibacchêus.*
35. ⏑-⏑⏑-⏑ Furor brevis, ira. *Diſcolius.*
36. -⏑---⏑- Fluctus in ſimpulo. *Dicreticus.*
37. ⏑⏑-⏑⏑- Eat Anticyras. *Dianapæſtus.*
38. --⏑--⏑ Aut Cæſar aut nullus. *Dilatius.*
39. -⏑⏑⏑-⏑ Ex tripode fatur. *Dactylo-ſcolius.*
40. ⏑---⏑- Senectus morbus eſt. *Bacchêo-creticus.*
41. ⏑-⏑⏑⏑- Emis, modò roges. *Scolio-anapæſtus.*
42. -⏑----⏑ Vultus index mentis. *Cretico-latius.*
43. -⏑⏑⏑⏑- Paſcere tineas. *Dactylo-anapæſtus.*
44. ⏑-----⏑ Vir unus, vir nullus. *Bacchêo-latius.*
45. ---⏑⏑⏑ Lac lacti ſimile. *Canio-chorêus.*
46. ⏑⏑⏑--- Bonus odor lucri. *Chorêo-canius.*

47. ⏑ – – – ⏑⏑ Acu rem tangere. *Bacchêo-dactylus.*
48. – ⏑⏑⏑ – – Pauperior Iro. *Dactylo-bacchêus.*
49. ⏑⏑ – – – ⏑ Sceleris, mors pœna. *Anapæſto-latius.*
50. – – ⏑⏑⏑ – Dux fæmina mali. *Latio-anapæſtus.*
51. – ⏑ – ⏑ – ⏑ Par pari referre. *Cretico-ſcolius.*
52. ⏑ – ⏑ – ⏑ – Docet diem dies. *Scolio-creticus.*
53. – – ⏑⏑ – ⏑ Poſt nubila Phœbus. *Latio-ſcolius.*
54. ⏑⏑ – – ⏑ – Lupus in fabulâ. *Anapæſto-creticus.*
55. ⏑ – ⏑⏑ – – Adonidis horti. *Scolio-bacchêus.*
56. – ⏑ – – ⏑⏑ Sus Minervam docet. *Cretico-dactylus.*
57. ⏑ – – ⏑ – ⏑ Cleanthis lucerna. *Bacchêo-ſcolius.*
58. – ⏑⏑ – ⏑ – Bis pueri, ſenes. *Dactylo-creticus.*
59. ⏑ – ⏑ – – ⏑ Notare carbone. *Scolio-latius.*
60. – ⏑ – ⏑⏑ – Magnus Ardelio. *Cretico-anapæſtus.*
61. ⏑⏑ – ⏑ – – Aquilæ ſenectus. *Anapæſto-bacchêus.*
62. – – ⏑ – ⏑⏑ Divina virgula. *Latio-dactylus.*
63. – ⏑⏑ – – ⏑ Alcinoo poma. *Dactylo-latius.*
64. ⏑ – – ⏑⏑ – Manum de tabulâ. *Bacchêo-anapæſtus.*

Several Feet may be of equal Meaſures and uſed for one another; as

1. Spondee – –. Dactyl – ⏑⏑. Anapæſt ⏑⏑ –. Proceleuſmatic ⏑⏑⏑⏑: equal to two long.
2. Bacchée ⏑ – – Antibacchée – – ⏑. Cretic – ⏑ –. Pæons 1. – ⏑⏑⏑. 2. ⏑ – ⏑⏑. 3. ⏑⏑ – ⏑. 4. ⏑⏑⏑ – Orthius ⏑⏑⏑⏑⏑: equal to two long and a ſhort.
3. Moloſſus – – –. Choriamb – ⏑⏑ –. Antiſpaſt ⏑ – ⏑ Ionic the great – – ⏑⏑. Ionic the leſs ⏑⏑ – –. Dijamb ⏑ – ⏑ –. Ditrochée – ⏑ – ⏑. Meſomacer ⏑ – – ⏑ Dichorêus ⏑⏑⏑⏑⏑⏑: equal to three long.

The *Varying* of the Syllables in the feet is a *Poetical Figure*. The *meaſure* or *number* of feet is a *Meter*. The *compoſure* or *Harmony* of feet is a *Verſe*.

Poetical

Poetical Figures

Varie the Syllables three ways, 1st. in Coherence; *Synæreſis* and *Diæreſis*: 2dly. in Quantity; *Syſtole* and *Diaſtole*: 3dly. in Equivalence; *Antipodia*.

Synæreſis does contract two vowels into a diphthong; as *Nereîdum chorus. Virg.* for *Nereïdum*. Or uſes two vowels in the middle as one, without contraction; as *alvearia vimine tecta. Virg.* This is called *Synizeſis*. Or laſtly, with contraction changes a letter; as non *obiit* ſed *abît*. *Auſon.* for *abiit*. *reîce capellas. Virg.* for *rejice*. This is *Craſis*.

Hereto belongs *Synalæpha*, which cuts off the final vowel: and *Ecthlipſis*, which takes away the vowel with [*m*]; both, afore a vowel following; as *Ill-e ego* &c. *monſtr-um horrendum. Virg.*

These elisions are to be avoided in monosyllables, and afore the laſt foot; ſuch as; Si ad vitulum ſpectes. *Virg.* Deïdeat Æthiopem albus. *Juven.*

The old Poets did cut off [s] as; decidere falcibu-s ramos. *Ennius.*

A Diphthong or long vowel is ſometimes not cut off; as

Inſulæ Ionio in magno. Litrus Hyla, Hyla, omne ſonaret. *Virg.*

The Interjectional [o] never; as O & præſidium. *Horat.*

Diæreſis reſolves one Syllable into two; as *evolüiſſe* for *evolviſſe*. *Ovid. Sylüæ* for *Sylvæ*. *Horat.*

Syſtole ſhortens a long Syllable; as]

Obſtupui, ſteterúntque comæ. Virg.

Diaſtole makes a ſhort Syllable long; as

Exercet Dīana choros. Virg.

To this may be placed *Cæſura*, that lengthens a Syllable, the laſt of a word and firſt of a foot; as *Pectoribūs inhians. Virg.*

A ſhort Syllable in the end of a Spondée; afore two initial conſonants is rarely made long: as date tela, ſcandite muros. *Virg.* This is rather a Licence.

Antipodia uſes one foot in a verſe for another equal to it; v.g. Anapeſt or Proceleuſmatic for Dactyl or Spondée; as *Fluviorum rex. Intexunt abiete coſtas. Virg.*

Meter.

Meter.

One Heroic, or one tetraſyllable foot; two Iambic, trochaic, or anapeſtic feet; or equal meaſures to them, make a Monometer: Theſe multiplied make a Dimeter, Trimeter, Tetrameter, Pentameter, Hexameter. &c.

Any Meter and half is called Hemiolion. *Heph. p. 48.*

A Meter for *want* of a Syllable in the beginning, is called Acephalus; in the end, either Catalectic or Miurus: in the middle, Lagarus; for want of a foot in the end, Brachycatalectic. For *exceſs*, in the beginning, it is called Procephalus; in the midle, Emboliмus or Meſoperiſſus; in the end, Hypercatalectic; in any place, Hypermeter.

A Verſe.

Is the *Ordering* of Feet in *ſtrict* meaſures.

The Engliſh word Verſe is made to expreſs two Latin Words. 1. *Verſus* i.e. any one Meter *returned* or repeated. 2. *Carmen*; either *generally*, any kind; or *properly*, a copy of any kind.

A *multitude* of verſes is called a Poem, in Greek, i.e. a *Work*.

Feet of *long* Syllables beſt ſuit with a *grave* ſubject; of *ſhort*, with *light*.

Moſt Verſes may ſeem to be of divers kinds, from the divers way of meaſuring them.

The laſt Syllable of the foregoing word does beſt begin the 3d and 4th foot. The laſt Syllable of a Verſe may be long or ſhort.

All Verſes beſt conclude with a whole word. For although The Ancients Simonides, Sappho, Pindar, Virgil, and Horace ſometimes diſtract the latter ſyllables to the following Verſe: yet Hephæſtion (p. 14.) juſtly diſlikes the imitation.

Parts of a Verſe from the odd number of long Syllables 3, 5, 7 &c. are called triemimeris, penthemimeris, hepthemimeris, &c.

Here note [as p. 3.] two ſhort are as one long. *Hephæſtion* (p. 33.) and his *Scholiaſt* apply theſe names to the halves of any ſingle feet.

The Principal kinds of Verſe are four. 1. Heroic. 2. Elegiac. 3. Iambic. 4. Trochaic. Of theſe, the two latter eſpecially may be called *pure*, having only their proper foot: or *impure*, having certain others.

The names of the chief Authors are ſet to their reſpective Verſes: many according to Hephæſtion; others out of Servius Honoratus &c.

Examples

Examples of every kind, Perfect or Imperfect, ſhould rather be taken out of the Greek Poets, who were the Authors or firſt Writers: but this Inſtitution requires examples out of the Latin Poets, that are moſt Claſſic, and in the hands of young learners.

1. An Heroic Verſe.

The Great Authors *Homer* and *Virgil.*

This Verſe is called *Heroic*, as relating the deeds of Heroes: Epic from the Greek verb, with which Homer begins his Odyſſea. *Euſt.*

It conſiſts of ſix feet, Spondées or Dactyls: In the fifth place, a Dactyl, in the ſixth a Spondée; in the former places, Spondée or Dactyl; as

Felix, qui potuit rerum cognoſcere cauſas. Virg.

The firſt four are variable 16 ways, thus:

Feet: 1.	2.	3.	4.	5.	6.
– –	– –	– –	– –		
– ◡◡	– ◡◡	– ◡◡	– ◡◡		
– –	– –	– –	◡ –		
– –	– –	◡ –	– –		
– –	◡ –	– –	– –		
◡ –	– –	– –	– –		
◡ –	◡ –	◡ –	– –		
◡ –	◡ –	– –	◡ –	◡ –	– –
◡ –	– –	◡ –	◡ –		
– –	◡ –	◡ –	◡ –		
– –	– –	◡ –	◡ –		
– –	– ◡	– –	◡ –		
– –	◡ –	◡ –	– –		
– ◡	◡ –	– –	– –		
◡ –	◡ –	◡ –	– –		
◡ –	– –	– –	◡ –		

The laſt word of an Heroic Hexameter muſt be a Spondée or Bacchée; the laſt of an Elegiac, an Iambic.

Words

Words of other meaſures are left to Authors, and not to be uſed by Learners.

When the laſt Syllable of a word cloſes the fourth foot being a Dactyl, the Verſe is called *Bucolic*; much obſerved by *Theocritus*; and ſeldom, by *Virgil*; as *Nos patriæ fines, & dulcia linquimus arva*.

The Hexameter is called Spondêac [vulgarly Spondaic] when a Spondée is the fifth foot; Dactylic, when it is only the Sixth; as

Chara Deûm Soboles magnum Jovis incrementum.
Panditur interea domus omnipotentis Olympi. Virg.

If the firſt be a Spondée and Dactyls follow, the verſe is called Æolic. *Heph.* p. 23.

Inferretq; deos Latio, genus unde Latinum. Virg.

Other diſſyllables may precede the Dactyls. *Heph ibid.*

Heptameter. Hypercat. The Author *Ibycus. Serv.*
Verſiculos tibi dactylicos cecini puer optime, quos facim.

Heptameter. The Author *Steſichorus. Serv:*
Æacides juvenis trahit Hectora, plangite Pergama Truc

Hexameter *Meſoperiſſus*, inſerts a Syllable into the fifth foot, the fourth always a Dactyl. The Author *Archilochus. Heph. p.* 22.

Feſtus Apoſtolici nobis redit hic di- [-es] *triumphi.*
Prud. periſteph. Hymn. 12.

Hexam. Hypercat. The Author *Alcman. Serv:*
Alma Venus Paphon ingreditur, roſa luceat ex Adytis.
Atria, dependent lychni laquearibus aureïs. Virg.

The two latter Syllables may be contracted by Synæreſis; as it were *aureis.*

The laſt vowel of this kind is commonly cut off by the vowel beginning the next Verſe; as *Inſeritur verò ex fœtu nucis arbutus horrida:*
Et ſteriles platani &c. Virg.

This kind of Verſe from the laſt foot, is called Dactylic by *Servius* upon *Virgil*; Georgic. 2.

In

Hexameter *Miurus* has a ſhort Syllable for a long, i.e. Iambic for Spondée in the laſt place; as *Terentian*;

Attoniti Troes viſo ſerpente pavĭtant. So *Virgil*;

Quanquam animus meminiſſe horret luctuq; refŭgit.

Though an Heroic Verſe wanting a Syllable in the laſt foot is rightly called Catalectic; yet in reference to the entire meter with a ſyllable abounding, it may be called Hypermeter.

Heroics Catalectic.

Virgil intermingles ſeveral ſorts in his Æneids.

3 Monometers. 1 Dimeter. 14 Dimeters catalectic. 16 Trimeters Catalectic. 3 Tetrameters *initial.* 15 Tetrameters Catalectic.

Hexam. Catalect. The Author *Charilus*:

Pulchra puella comas cingit ſibi palmitibus. Serv.

Heroic of five Feet. Called *Simonidium. Serv.*

Heu quam dulce malum mortalibus additum. Senec. Agam. Verſ. 585.

The Greek uſually end in a diſſyllable, the Author Simmias. Hephæſtion. p. 21. This may be called a Pentameter.

Tetrameter *initial.* The Author *Alcman.* Heph. p. 22.

Unum pro multis dabitur caput. Virg.

Archilochus afore, and Anacreon after Alcman, uſed a Spondée in the end. *Heph ibid.*

Tetram. Hypercat. The Author *Alcman*:

Vita quieta nimis caret ingenio. Serv.

Tetrameter Catalectic. 3 Dactyls and a Syllable. The Author *Alcman. Heph.* p. 22.

Exitiis poſitura modum. Virg.

Other meaſures are uſed; as

Cum Turnus ſuper aſſiſtēns. Virg.

Liberat arva priùs fruticĭbŭs. Boet. l. 3. m. 1.

Tetrameter *final.*

Melliflui canit oris Homerus. Boet. l. 5. m. 2.

Tri-

Trimeter. *Caruleum erexit Caput. Oedip.* 729.

There are two principal Trimeters.

1. *Glyconic*: the Author *Glycon. Heph.* p. 32. *Orpheus Calliopæ genus. Herc. Oet: Verſ.* 1032.

The firſt foot is varied by a trochée, Iambic or Dactyl; the ſecond is found a tribrach; as

Collis & Heliconii. Catul. Carm. 35.
Diana ſumus in fide. Catul. Carm 35.
Induc pallia ſerica: The Author of this Verſe *Simonides. Serv.*
& corporibus extimis. Boet. l. 5. m. 4.

2. *Pherecratian*: the Author *Pherecrates. Heph.* p. 33. *Orpheus carmina fundens. Herc. Oet. Verſ.* 1078.

The *Pherecratian* alſo varies the firſt foot by a Trochée, Iambic, Dactyl or Anapeſt; as

Amnemque ſonantem. Puellæque canamus. Catul. carm. 35.
Tundite pectora palmis: The Author *Alcman. Serv.*
Simili ſurgit ab ortu. Boet. l. 3. m. 6.

Trimeter Catal. The Author *Archilochus. Heph.* p. 32. *Numina magna Deum. Virg.*

An Adonic

Is the two laſt feet of an Heroic Verſe; as *Ultima Thule. Med.* 379.

Catalectic. *Dardanidæ.* Or, *Hæc effata. Virg.*

An Elegiac Verſe.

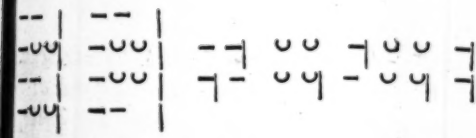
The *firſt* known Author *Theognis.* The *beſt*, *Ovid.*

It is called *Elegiac*; from its firſt uſe in *Lamentation. Ovid* calls it a *ſhort* Verſe; and the Hexameter, *Long.* Both commonly uſed by pares; as *Longis verſibus adde breves. Ovid.*

It conſiſts of five feet, three Heroic, whereof the third is always a Spondée; & two Anapeſts:

Hephestion [p.54] rather measures it by a double Penthemimeris: The first, any two Heroic feet with a long Syllable: The second always two Dactyls, and a Syllable: The two Syllables put together make the fifth foot.

Here note the long Syllable of the former Penthemimer must end a word. *Heph.* p.55.



Appoſui ſe | nis Te | duce quin | que pedes. Ovid.
Appoſui ſe | nis | Te duce | quinque pe | des.

Examples that make the first Penthemimer not end the word, are not to be imitated; as *Imponunt (uper al || tare tuum virtutes.* Pſal. 50. v. 19: & *Hieronymi* Tranſlation. Nor ſuch as Chime the midle and laſt foot: *viæ.*

Ora citatorum dextrâ detorſa equorum. Virg.
Quærebant flaves per nemus omne faves. Ovid.

Theſe are called Leonin Verſes from the Benedictin Leonius of Paris, that brought them into uſe, Anno Domini 1160.

The Heroic Hexameter and Elegiac ſeem to make two other kinds of Verſes. The Hexameter, an Anapeſtic; the Elegiac, an Aſclepiad.

An Anapeſtic Verſe.

The Author *Simonides. Serv.*

If the laſt Syllable of a Dactylic Hexameter *be*, or be *made* to be, a Pyrrichie, and removed to begin the Verſe, it is an Anapeſtic Trimeter; as

Dact.

Dact. *Quàm tua, Flacce, poemata plena lepore placent mî!* or *mihi.*

Anap. *Mihi quàm tua, Flacce, poemata plena lepre placent!*

There is hardly found a perfect Anapeſtic above the Dimetr. Hephæſtion cites various catalectics out of the Greeks; Ariſtoxenus, Citinus, Epicharmus, Ariſtophanes, Archebulus, Simmias, Calliſthenes, Alcman. p. 25. 26. 27. 28.

Trimeter. The Author *Steſichorus:*
Latet in thalamo tibi Virgo decens, veneris Specie. Serv.

Trimeter. Hypercat. The Author *Simonides:*
Tuba terribili procul are ſonat, clypeum quatit miles. Serv.

Trimeter Catal. The Author *Alcman:*
Date Pierides mihi carmina Dactylicorum. Serv.

Trimeter brachycatal. The Author *Pindar:*
Medium rapido mare Tibris adit fluvio. Serv.

Dimeter. The Author *Ariſtophanes.*
Ubi mæſta Sonat Phaetontiadum. Herc. Oet. 187.

Dimeter Hypercat. The Author *Alcman:*
Tremulum mare molliſtuâ nitet aurâ. Serv.

Dimeter Catal. The Author *Archilochus. Heph.* p. 27.
Deus ignee fons animarum. Prud. Cathemer. Hym. 11.

Dimeter Brachycat. The Author *Ariſtophanes. Serv.*
Dominis preſſus iniquis Boet. l. 4. m. 2.

Monometer.
Ululâſſe canes. Sen. Oed. 179.

It is called Trinicium by Servius, or Thirinicium according to Micyllus out of him, both corruptly perhaps for Phrynichium.

Monometer Hypercatal. The Author *Ariſtophanes:*
Animus malè fortis. Serv.

The

The *impure* Anapestic Verse

Admits a Spondée in any place, a Dactyl chiefly in the 1st. and 3d. *rarely in the 2d. and 4th. (see * beneath). The Dimeter is most used: and the Anapest and Spondée in the 4 places of it are variable 16 ways; as are the Dactyl and Spondée (pag. 147.)

⏑⏑– ⏑⏑– ⏑⏑– ⏑⏑–
– – – – – – – –
⏑⏑– – – &c. The Dactyl keeping the 1st. or 3d. place may here be varied also throughout the Table, as there.

O quam miserum est nescire mori. Agam. 606.
Feriunt celsos fulmina colles. Agam. 96.
Corpora morbis majora patent. 97.
Absint tantum tristes pœnæ. Ostav. 652.
*Vallibus *editus, annosa supra. Oedip. 726.*
*Non erat usus: nondum *Pleiadas. Med. 311.*

There are found other feet:

A Tribrach; as *Dubioquĕ nĭmĭs excelsa locas. Med. 59.*
An Iambic; as *Hederâvĕ mōllem bacciferâ. Oed. 414.*
A Trochée; as *Nata Tonāntĭs inclyta Pallas. Agam. 354.*
Flebile sāxŭm, & adhuc lacrymas. Agam. 374.
A Bacchée; as *Meliorĕ pēnsāns damna marito. Oed. 490.*
A Cretic; as *Frēgĭt īnsultans, duxit ad ortus. Agam. 835; and Oedip. 474, 475, 476.*

Dimeter Hypercat.

Heu quàm præcipiti mersa profundo. Boet. l. 1. m. 2.

Monometer. *Fortuna ruit. Herc. Oet. 603.*

Monometer Hypercat. *Invicta Neroni. Octav.* 308.

Trimeter, with two midle Iambics.

Cum Dardana tectā Dōrĭcī raperent ignes. Agam. 608.

An Asclepiad.

The Author *Asclepiades. Heph.* p. 34.

The Elegiac wanting the last syllable is an Asclepiad; but with unalterable measures, Spondée, Dactyl, Spondée, Anapest, Pyrrichie; as

Quīd dī | gnūm stŏlĭ | dīs mēn | tĭbŭs īm | prĕcĕr. Boet. l. 3. m. 7.

The Vulgar measuring is by Spondée, Dactyl, long Syllable and two Dactyls.

Quīd dī | gnūm stŏlĭ | dīs || mēntĭbŭs | īmprĕcĕr.

Sometimes the first foot is a Dactyl;

ēffŭgĭum, miseros libera mors vocet. Agam. 887.

Sometimes the second is a Spondée;

Sub no | stræ rā | mis constitit arboris. Oed. 717.

The two last feet are ill transposed; as

Quæ tibi nobiles Thebæ, Bacche, tuæ. Oed. 405. for *Thebæ, Bacche, tuæ quæ tibi nobiles.*

An Alcaic.

The Author *Alcæus. Diomed.*

The Asclepiad, taking an Iambic in the second place for the Dactyl, is made an Alcaic; as

Nōn īn | quĭnā | bīs mēm | brā lĭbī | dĭnĕ. Prud. peristeph. 14.

The first foot is found an Iambic; as

ĭnāuspicatâ de bove tradidit. Oed. 723.

An

An Iambic Verſe.

The Author *Archilochus.* (*Horace*; and *Heph.* p. 16.)
The laſt foot always an Iambic.
The *pure* Iambic has none but Iambic feet.
Trimeter.
Gĕmēl | lē Cā | ſtŏr ēt | gĕmēl | lē Cā | ſtŏrīs. Catul. car. 4.
Dimeter.
Crŭcīs | pĕrī | tŭs ār | tĭfĕx. Prud. periſteph. hym. 5.
Dimeter Catalectic, much uſed by *Anacreon.*
Idis | Pătēr | sŭprē | mĕ. Prud. Cathem. hym. 7.
The *mixt* Iambic, inſtead of its proper foot admits in the *even* places *viz.* 2^d. 4th. &c. a Tribrach; in the *odd*, a Spondée, Anapeſt or Tribrach; Seldom a Dactyl.

1	2	3	4	5	6
– –	⏑ –	– –	⏑ –	– –	⏑ –
⏑ ⏑ –	⏑ ⏑ ⏑	⏑ ⏑ –	⏑ ⏑ ⏑	⏑ ⏑ –	
⏑ –		⏑ –			
⏑ ⏑ ⏑		⏑ ⏑ ⏑			
– ⏑ ⏑		– ⏑ ⏑		* ⏑ –	

* An Iambic in the fifth place agrees not with the gravity or Euphony of the Verſe; and is therefore rarely uſed by Seneca; ſuch as
Phœbi nepotes Siſyphi nĕpōtibus. Med. 512.
Tetrameter: *Anacreontic. Serv.*
Cōncē | dĭte āt | que ābſcē | dĭte ō | mnēs dē | vĭā | dīſcē | dĭtē. Plaut. Amphitr. Act. 3. *Scen.* 4. *v.* 1.
Tetrameter Catalectic: *Ariſtophanian. Serv.*
Deprenſa navis in mari veſaniente vento. Catul. Car. 25.
Tetrameter brachycatalectic. *Ariſtophanian:*
Marcent lucernæ, ſol propinquat, non tamen vacas. Serv.
Trimeter, moſt in uſe, *Archilochian. Serv.*
Curæ leves loquuntur, ingentes ſtupent. Hip. 604.

Trimeter hypercatalectic. *Anacreontic :*
Amor puellæ pectus improbæ fatigat. Serv.
Trimeter Catal. The Author *Archilochus. Heph.* p. 16.
Doctis Thalia vatibus favebat. Serv.
Trimeter Brachycatalectic. *Alcmanian. Serv.*
Sonuit reflexo classicum cornu. Oed. 733.
Dimeter. *Archilochian. Serv.*
Fortuna non mutat genus. Hor. Epod. 4.
Dimeter Hypercatalectic. *Alcaic. Serv.*
Non illa bello victa, nec armis. Agam. 609.
Dimeter Catalectic. *Euripidéan. Serv.*
Dux noctis Hesperugo. Med. 877.
Dimeter Brachycatal. or Iambic* Hemiolion.* p. 146.
Anacreontic. Serv. Vale bene, ut valeam. Auson. Epist. 3.
Monometer. *Quid illud est? Ter.* Andr.
Monometer hypercatalectic. *Aristophanian. Serv.*
Religare frontem. Oed. 415.
Monometer Catalectic. *Me nolle. Hippol.* 603.

The Comœdians in all places but the last use a greater licence. ex. gr.
Tetrameter.
Pĕcū nĭam īn|lŏcō|nēglĭgĕ|rĕ māx|ĭmum īn|tērdum ēst|lŭcrūm. Ter. Trimeter.
Mĕnān|dēr fē|cĭt ān|drĭam ēt|Pĕrīn|thĭām. Ter.

A Scazon.

The Author *Hipponax. Serv.*

If an Iambic be put in the fift place of a Trimeter Iambic, and a Spondée follow, it is a *Scazon* or *Choliambic.* i.e. a *lame Iambic.*; as
Apollinarem conveni mĕūm, Scāzōn. Mart.

Sometimes it ends with a Dispondée, or Hegemocanius; as
Quisquis profundâ mente vestīgāt vĕrūm. Boet. l. 3. m. 11.
Egnati, opaca quem bonum faciāt barbā, Catul. carm. 40.

A Trochaic Verſe.

The Author *Archilochus. Heph. p.* 19.

The Iambic and Trochaic, by tranſpoſing the firſt Syllable to the laſt of the Verſe, change themſelves, each into other; as

Iambic. *Quis hoc poteſt videre, quis poteſt pati? Catul. Carm.* 30.

Trochaic. *Hoc poteſt videre quis, poteſt pati quis?*

A *pure* Trochaic is rarely found: The Catalectics are moſt uſed. *Heph.* p. 18.

Trimeter. uſed by *Sotades:*

Arvă ſiccă, Nilus intrăt, ītĕ lætī. Serv.

Dimeter. *Alcmanian. Serv.*

Hinc flagellat ira mentem. Boet. l. 4. m. 2.

Dimeter hypercatalectic. *Bacchylidian:*

Floribus corona texitur. Serv.

Dimeter Catalectic. *Euripidean. Heph. p.* 18.

Ut canam fidelibus. Prud. Cathem. hymn. 10.

Dimeter brachycatalectic or Trochaic Hemiolion.

Pindaric: Bacche, junge tigres. Serv.

Monom. hypercat. *Pancratian: Author Optimus. Serv.*

The *impure* Trochaic

Moſt uſual in Seneca, is a Tetrameter Catalectic, with the meaſures in the type following:

Feet	1.	2.	3.	4.	5.	6.	7.	8.
	–⏑	– –	–⏑	– –	–⏑	– –	–⏑	–
	–⏑⏑	–⏑⏑	⏑⏑⏑	–⏑	⏑⏑⏑	–⏑⏑	⏑⏑⏑	
	⏑⏑⏑	⏑⏑–		–⏑⏑		–⏑		
	– –	–⏑	– –					

Hephæſtion adds an Iambic in the odd places.

Te-

Tetrameter Catalect. the Author *Hipponax. Serv.*
*Vōs prĕ|cōrvūl|gūs sī|lēntûm|vōsq; |fĕrā|lēsdĕ|ōs M.*739
This kind of Verse may be called a Trimeter Iambic, that abounds with an initial Cretic; or equal measures viz. 1. Pœon; as
Vos precor | vulgus | scire | sum vos | qui te | valde | deos. Mediol. 739.
undâ misĕ | ris gra | ta Le | thes vos | quatur | pentes | Lacus. Hipp. 1197.
Tetram. Brachycat. used by *Sotades*:
Thracium nefas renarrat cantitans hirundo. Serv.
Trimeter. used by *Sotades. Serv.*
Pectore e medio rapi spolium & sagittas. Agam. 843.
Trimeter Hypercatal. used by *Sappho. Serv.*
Vidimus patriam ruentem nocte funestâ. Agam. 607.
Trimeter Catalectic. *Archilochian. Heph. p.* 19.
Nox amoris & quietis conscia. Serv.
This in *Hephestion.* p. 19. is called also an Iambic *Acephalus.*
Trimeter Brachycat. used by *Archilochus. Heph.* p. 16.
Non maria asperis in sanie Coris. Agam. 594.
Dimeter *Alcmanian. Serv.*
Da puer plectrum choreis. Prud. Cathem. Hym. 10.
Geryonis spolium triformis. Agam. 837.
Dimeter Hypercat. used by *Bacchylides. Serv.*
Sensit ortus, sensit occasus. Agam. 820.
Dimeter Catalectic. *Euripidean. Heph. p.* 18.
Ede, quid portes novi. Oed. 914.
Dimeter Brachycat. *Pindaric.*
Nutriunt humore. Catul. Car. 62.
Monometer Hypercat. *Euripidean.*
Decidit cælo. Agam. 847.
Monometer Catalectic. *Euripidean. Occidi. Ter.*

The Comœdians use their Licence in all places of the Trochaic Verses, as afore in the Iambic.

Tetrameters Hypercatalectic.
Hoccì | ne est hu | manum | factum aut | inca | pium? hoccì | ne offici | um pa | trì? Ter. Aud. 1 Act. 3. scen. *Tu fortasse, quid me fiat, parvi pendis, dum illi consulas. Heaut.* Act. 4. Scen. 3. v. 37.

A Phaleucian.

The mixt Trochaic, Trimeter Brachycat. with the following measures unalterable, is a *Phalacian.* *Heph.* p. 33. vulgarly called *Phaleucian.*

Feet.	1.	2.	3.	4.	5.	
	Nōn ēst	*vīvĕrĕ*	*sēd vă*	*lērĕ*	*vītă.*	*Mart.*

Sometimes a Trochée, Iambic, or Tribrach is the first foot; and a Spondée the second; as in *Catullus.*

Ari | dâ modo pumice expolitum.
Mōlĕ | esse aliquid putare nugas. *Car.* 1.

Gāmĕrĭ | um mihi pessima puella.
Ona | mūs, sī | fortè non molestum est. *Car.* 56.

A Dactyl for the Trochée

Mutam barbaricīs ĕquĭtum catervis. *Agam.* 597.

A Sapphic.

The Author *Sappho.*

If a Trochée, one of the latter measures of a Phaleucian, be made the first, it is a Sapphic; as

Vita | non est | vivere | sed va | lere.

These two are called also *hendecasyllables* or Verses of eleven Syllables.

There are found other measures; *viz.* a Spondée or Dactyl in the first place; as

Solūs contemptor levium deorum. *Agam.* 601.
Et licĕ | it versare dolos, ut ipsi. *Agam.* 627.
Fraudē sŭ | â capti caderent Pelasgi *Agam.* 628.

In both the examples, may be a Synizesis; Licuit, suâ.

A Dactyl or Trochée in the second place; as

Ardus Arcădium geminumq; plaustrum. *Oed.* 477.
Seu Sacās, săgittiferosq; Parthos. *Catul.* *Car.* 11.

An Iambic in the second place, i.e. the short Syllable transposed; as *Levītquĕ Dirce Tyrios colores.* *Oed.* 714.

A

A Spondée or Antibacchée in the third place; as
Argos ira | ta cā | rum noverca. Agam. 805.
Semper ingentēs ēdūcas alumnos. Agam. 806.
A Sapphic Hypercatalectic.
Lucidum cœli decus huc ades vo | tis. Oed. 405.
Procephalus; i.e. redundant with an initial long Syllable, or Pyrrichie;
Non | urbe cum totâ populos cadentes. Agam. 598.
Tum | ille bissono meruit labore. Agam. 808.
Acephalus; i.e. an initial Anapest; or *Lagarus* i.e. a Spondée; instead of a Cretic; as
Pŏsĭtīs tandem levibus sagittis.
Mītēs facta, sacer & Cithæron. Oed. 482, 483.

There is also a *Tribrach* Verse, equal to the Iambic or Trochaic in measure; as
Et ami | ta vene | rea pro | periter | obiit. Auson. Parent. 27.

¶ It is further to be observed that the Iambic and Trochaic feet make not only their respective Verses, excluding each the other from their own proper Verse; but also concur to make compound measures or feet, Choriamb and Antispast, by placing the Trochée afore or after the Iambic; as

Trochée –⏑ Iambic ⏑–, Choriamb –⏑⏑–.
Iambic ⏑– Trochée –⏑, Antispast ⏑––⏑.

These two Tetrasyllable feet may also seem to be made of a Pyrrichie and Spondée, by putting the one between the Syllables of the other. The Pyrrichie within the Spondée makes a Choriamb; the Spondée within the Pyrrichie, an Antispast; both of equal measures.

Hence arise Verses having the same feet and name. *viz*: Choriambic and Antispastic, hardly to be found *pure*, but so *esteemed* when other feet are used with them, of measures equal to six short Syllables.

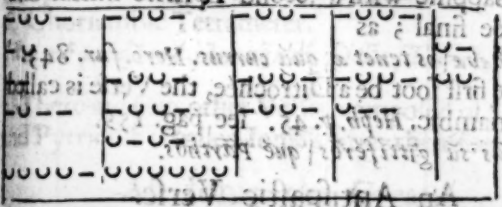
A

A Choriambic

Has at least one Choriamb: Sometimes between the parts of another Choriamb. *viz.* There is used in the *beginning* a Trochée or Spondée, with an Iambic or Pyrrichie in the *end*; Both together taken for a Choriamb. Also an *initial* second Epitrite, with a *final* Bacchée, for two Choriambs.

There are found a Dijamb, Hypomacer, or Dichorie, equal measures to a Choriamb.

The Type of a Tetrameter.



–⏑⏑–	–⏑⏑–	–⏑⏑–	–⏑⏑–	
–⏑				⏑–
	–⏑⏑–	–⏑⏑–	–⏑⏑–	⏑⏑
–⏑––	–⏑⏑–	–⏑⏑–	⏑––	
	⏑–⏑–			
⏑⏑⏑⏑–	⏑⏑⏑⏑⏑⏑			

Theocritus Idyll. 28. uses an Iambic, as well as Trochée in the beginning, v. 2. the fourth Pæon in the midle. *ibid.* and first Pæon. v. 4.

Tetrameter. *Catul. car.* 31.

Jām mē | prōdĕrĕ, jām | nōn dŭbĭtās | fāllĕrĕ, pēr | fĭdĕ.
Sæpĕ trāns fī | nēm jăcŭlō | nōbĭlĭs ēx | pĕdĭtō. Hor. l. 1. O. 8.

Tetrameter Catalectic. *Terentian.*

O cătĕ rē | rūm sătŏr, ō | prīncĭpĭūm | dĕōrūm.
Cūi rĕ sĕrā | tă mūgĭūnt | aūrĕă clāu | stră mūndī.
Tĭbĭ vĕtŭs ā | ră călŭĭt ăb ŏ | rīgĭnĕō | săcēllō. Ibid.

Trimeter Catalectic.

Vīrgĭlĭūs | Māntŭă quēm | crĕāvīt. Serv.

Dimeter. *Fātă | sī lĭcĕāt | mĭhī. Seneca. Oed.* 882.

Dimeter Catalectic.

Lydĭă dīc | pĕr ōmnēs. Hor. l. 1. *Ode.* 8.

The measures of a Choriambic Verse are applyed to scan other Verses. *viz.*

1. The

1. The Asclepiad and Glyconian, with a Spondée first and Pyrrichee last, as

O fōr | tūnă vĭrīs | īnvĭdă fōr | tĭbŭs. Herc. fur. 843.
Jām nūl | lūs sŭpĕrēst || tĭmŏr. Ibid. 889.

2. The Pherecratian like the Glyconian, with a long Syllable for two short, as

Tūnc ōb | lĭtă vĕnē | nī.

See this Verse among the Glyconians in Seneca, *Herc. Oet. v.* 1064.

3. The Adonic, a Choriambic Monometer, with a final Syllable, as

Ultĭmă Thū | lē. Med. 379.

4. The Sapphic with a second Epitrite initial and a Bacchée final; as

Libră Phæbæ | os tenet æ | quă currus. Herc. fur. 843.

If the first foot be a Ditrochée, the Verse is called Epichoriambic. *Heph. p.* 45. see pag. 159.

Sēn săcās să | gĭttĭférōs | quĕ Pārthōs.

An Antispastic Verse.

A *pure* Antispastic is not easily found. Instead of its proper foot there are used æqual measures, as, the first Dipodie may be a Ditrochée or a fourth Epitrite, with a final Pæon or Bacchée; The midle, Antispastic's. But if a Dijamb be in the midle, the next Dipodie to it may be varied, as the first. *Heph.* p. 32.

⏑ – – ⏑ ⏑ – – ⏑ ⏑ – – ⏑ ⏑ – – ⏑
– ⏑ – ⏑ ⏑ – ⏑ – ⏑ – ⏑ –
⏑ – ⏑ ⏑
– – – ⏑ ⏑ – –

This Verse is scarce found but in Greek Authors: *Servius* gives these Latin.

Tetrameter Catalectic. *Alcaic.*

Infāndūm tĕ | tĭgīt sydĕ | ră cārmēn mă | gĭcōrūm.

Tri-

Trimeter Brachycatalectic, called *Phannium.*
Fūnī sēmĭ | dēūm nūmĕn | ădēſt.

It may be applyed (as it is by Hepheſtion) to the meaſuring of other Verſes; like the Choriambic afore.

1. Aſclepiad: *O fōrtūnă | vĭrĭs ĭnvĭ | dă fārtĭbŭs.*
2. Glyconian: *Jām nūllŭs sŭ | pĕrēſt tĭmŏr.*
3. Phaleucian: *Nōn ēſt vīvĕ | rĕ sĕd vălĕ | rĕ vīta.*
4. Pherecratian: *Tunc ōblĭtă | vĕnēnī.*
5. Anapeſtic Dimeter Catalectic.
Hēu quām præcĭ | pĭtĭ mērsă | prŏfundō.
6. Choriambic Tetrameter.
Jām mē prōdĕ | rĕ, jām nōn dŭ | bĭtās fāllĕ | rĕ, pērfĭdĕ.

There are two other Verſes compoſed of Spondée and Pyrrichie; called Ionic's from their feet.

An Ionic the Great

Beſides its own feet has equal meaſures, as Meſomacer, Moloſſus; in the end a Ditrochée rather than Ionic. *Heph.* p. 36. Alſo unequal, the ſecond Paon and ſecond Epitrite; which, if both be in the ſame Verſe, are equal to two Ionic's. The Cataleſtics end in a Cretic or Spondée.

When a Ditrochée follows the Ionic it may be called *Æolic*, as uſed by the Æoles, namely *Sapph.* *Heph.* p. 36, 37.

The Type of the Meaſures.

⏑⏑–– &c. –⏑–⏑
–⏑–⏑ ⏑⏑⏑
⏑⏑–⏑⏑ –⏑⏑⏑ &c.
⏑–⏑⏑ –⏑–– &c.
–⏑–
Cataleſtic ––

This

This Verſe is chiefly to be exemplifyed in Greek Authors; For imitation of whom, there are made ſuch kinds in Latin.

Dimeter.

If it has the firſt foot an Ionic, or Ditrochée; the laſt a Moloſſus; it is called *Cleomachean. Heph.* p. 36. as

Vĭrtūs sĭbĭ | mĕrcēs ēſt.

Dimeter Catalectic.

Teleſilla [*Heph.* p. 36] and *Ariſtophanes* make the firſt foot, an Ionic; the laſt, a Cretic; ſuch as

Vĭrtūtĕ pă | rā vĭăm.

Dimeter Brachycatalectic *Hipponactian*: conſiſts of an Ionic and Spondée; as

Pālmām căpĕ | vĭctŏr. Serv.

Trimeter

Called uſually *Æolic, Heph.* p. 37. has initial Ionic's, final Ditrochées; ſuch as,

Ah quām grăvĕ | quæ ăſſĕquī nĕ | quīs, ămārĕ!

Trimeter Brachycatalectic

Called *Praxillean*, and uſed by *Sappho* (*Heph.* p. 36.) conſiſts of two Ionics and a Spondée; or a midle Ditrochée; as

Fŏrtīs jŭvĕ | nīs ſūmĕ cŏ | rōnām. Serv.
Jām Cynthĭă | lūcĕt ōrbĕ | plēnō.

Tetrameter

Called alſo *Æolic* and uſed by *Sappho*; conſiſts of three Ionics and a Ditrochée. *Heph.* 37.

Rānâ tĕnĕ | râ Vĭrgŏ mă | gīs pūlchră nĭ | tēnſq; sālvĕ.

Trimeter and Tetrameter admit a ſecond Pæon and ſecond Epitrite.

Atŏccĭdĭt | ēcĕ Phœbē | nōctīs mĕdĭ | ūm pĕrāctŭm.
Tēmpūs fŭgĭt | ēt tŏr ōvă | cŭō jăcĕ | ō rĕlictă.

Tetrameter Brachycatalectic, moſt celebrated, is called *Sotadic. Heph.* p. 37.

A Sotadic Verſe

Largely exemplifyed by *Terentian*, with ſuch meaſures.

Vŏcāliă | quædām mĕmŏ | rānt cōnsŏnă | quædām,
Ēlĕmēntă rŭ | dēs quæ pŭĕ | rōs dŏcēnt mă | gīſtrī.
Ună quŏnĭ | ām săt hăbĭ | tum ēſt nŏtārĕ | fōrmă.

An Ionic the leſs.

Is oftner found *pure* than the Greater, and it uſes the third Pæon: The Catalectic ends in an Anapeſt or Spondée.

The Type of the Meaſures.

⏑⏑– – &c.
⏑⏑–⏑ –⏑– – &c.

Catalectic. ⏑⏑–
– –

Tetrameter. *Alcaic. Heph.*p.39. *Servius:*
Tĭmŏr ōmnēs | dŏcĕt ārtēs | tĭmŏr aŭgĕt | bŏnă mēntīs.
Tetrameter Catal. The Author *Phrynichus. Heph.*p.39
Tĭbĭ vērīs | fĕrŏ dōnūm | sŏlă quōd dānt | Vĕnĕrīs. Serv.
Tetram. Brachycat. The Author *Anacreon. Heph.*p.40.
Vĕnĕrīs vīs | ĭnĭmīcă | pērdĭtūm cŏ | quīt mĕ.
Trimeter. The Author *Sappho. Heph.* p. 39.
Mŏdŭlātūr | lĕpĭdĕ cār | mĭnă Flāccūs. Terentian.
Ănĭmūs quĭ | ētŭs ēt lĭ | bĕr ămōrīs.
Trimeter Catalectic. *Anacreontic:*
Fŭgĕ, Vĭrgō, | fŭgĕ mūnūs | Vĕnĕrīs. Serv.
Dimeter. The Author *Alcman. Heph.* p. 39.
* *Dĕdĭt ēt cōr | nŭă Lūnæ. Boet.* l. 3. met. 6.
Hăbĕt ōmnĭs | hōc vŏlŭptās. Boet. l. 3. m. 7.
* This Verſe is alſo a *Pherecratian* and *Anapeſtic*, ſee p. 150. 152.
Dimeter Catalectic. *Timocratian:*
Lŏsă vērīs | ſpĕcimĕn. Serv.

Epi-

Epionic Greater or Leſs.

The Ionics are called Epionics, beginning with one of theſe three feet, Dijamb, firſt or third Epitrite. *Heph.* p. 46, 47.

Epionic the Greater.

Trimeter, of twelve Syllables: called *Alcaic. Heph.* p. 46.

Quid o miſer | te perdis a | more fruſtra:
Odit Venus | te: odit Vene | ris, Cupido.

Epionic the Leſs.

Trimeter. *Alcmanian. Heph.* p. 47.

Salve puer | Veneris, na | te Cupido.

To the Ionic rightly belongs the *Pæonic* Verſe, differing chiefly in the meaſures: firſt in the *defect* of a *ſhort* Syllable; ſecondly in the *Pæon*, being here *firſt* or *fourth*.

A Pæonic Verſe

Has for its proper foot the firſt or laſt Pœon, or inſtead of it a Cretic, Bacchée, or Antibacchée, equal meaſures; ſometimes a Moloſſus, unequal.

This Verſe is ſcarce uſed but in Greek and Latin Comedians.

The Type of the meaſures to be uſed in any place.

–⏑⏑⏑ &c. ⏑⏑⏑– &c. –⏑– &c. ⏑––&c.
––⏑ &c. –⏑⏑– &c. ––– &c.

Tetrameter. *Ariſtophanian. Heph.* p. 42.

Mĕns hŏmĭnĭs | ĭmpĕtĕ sŭ | ō pĕnĕtrăt | ōmnĭa.

Tri-

Trimeter. *Ariſtophanian.*
spōntĕ sĭ quĭ | dĕm prŏpĕrăt | ōmnĕ mălŭm.
hŏſpĭtĭō | pūblĭcĭtŭs | ācĕĭpĭăt. Plaut. Amphit.
Dimeter. *Ariſtophanian.*
Quæ nŏcēnt | cūnctă cŭpĭs.
Tōtŭs ĕr | gō pĕrĕās.

If all the feet be Cretic, Bacchée or Antibacchée, the Verſe is called Cretic or Bacchéac. *Heph.* p. 41. 44.
Cretic.
Tetrameter. The Author *Simmias. Heph.* p. 43.
cōnvĕnīt | vĭctĭ ŭtrī | sīnt ĕō | prælĭō. Plaut. Amph. ſc. 1.
Trimeter Hypercatalectic.
Ĭt tămēn | rēs cōgĭt | dēnĕgā | rĕ. Ter.
Dimeter Hypercatalectic.
Vĭcĭmŭs | vī fĕrō | ces. Plaut. ibid.
Impare. Tetrameter.
Dĭſpĕrtī | sī vĭrī | dĭſpĕrtī | ti ōrdĭnēs. ibid.

Baccheác *Plaut. Menech.* Scen. 12. Lambin.
Clĭēntēs | sĭbi ōmnēs | vŏlūnt ēs | sĕ mūltōs.
Bacchéac and Antibacchéac. Tetrameter Catalectic.
Dătŭm dĕ | nĕgānt, quōd | dătum ĕſt, hī | tĭŭm
Plēnī, rŭ | pācēs, vĭ | rī fraudŭ | lēntī. Plaut. ibid.

A Galliambic Verſe.

So called from Galli, the Prieſts of Cybele; who ſang ſuch Verſes at their ſacrifices to her.

It is a kind of Pæonic Tetrameter; made chiefly of Pæons and a ſecond Epitrite; or equal meaſures *viz.* Antibacchée, Orthius, and Cretic, for the Pæons; Daſius, for the Epitrite. There are uſed ſome unequal; Ditrochée and Anapeſt.

The

The meaſures in the Type are obſerved in *Catullus*.

⏑⏑–⏑ . –⏑–– ⏑⏑–⏑ ⏑⏑⏑–
––⏑.*v*5 ⏑⏑⏑––.*v*4 ––⏑.*v*22 ⏑–⏑⏑–.*v*
⏑⏑⏑⏑⏑⏑.*v*23 ⏑–⏑⏑.*v*74 –⏑– .*v*31
⏑–⏑⏑.*v* 66 –⏑–⏑.*v*91 ⏑⏑– .*v*69
–⏑–⏑.*v* 9

* Synizeſis. v. 5. * *earum aditem.* * ſee *pag. 145. Obſerve. v. 60. *gymnaſiis*, the firſt Syllable ſhort. ſee *Carm.* 64.
Sŭpĕr ālŧă | vĕctŭs Atys | cĕlĕrī ră | tĕ mărĭa. &c.

¶ The kinds of Verſes having being ſhewed here follows the manner of uſing them together, in the Poets: either by putting diverſe kinds in one Verſe, or diverſe Verſes in one Poem.

Two kinds joyned in one Verſe uſually are diſtinguiſht by * *commas* or members.

*Comma here is not uſed as in Grammar for a ſtop. (p.4.), but for the cloſing of the firſt kind with a whole word.

Divers Kinds in one Verſe.

A Glyconico-Pherecratian

Conſiſts of two Commas; the firſt a Glyconic, the laſt a Pherecratian. The meaſures are to be conſidered in the Compound as afore in the Simple pag. 150. but the ſecond Syllable of both is uſually *ſhort*; the laſt of the Glyconic, *long*; as
Ocŭ | lōnĭă | quēm căpīs || pōntĕ | lædĕrĕ | lōngō. Catul. Carm. 17.

An

An Elegiambic.

The firſt Comma, an Elegiac Penthemimer; the ſecond, an Iambic Dimeter; as

Scribere verſiculos || *Amore perculſum gravi. Hor. Epod.* 11.

An Iambelegie.

The 1st. Comma, an Iambic Dimeter; the 2d. an Elegiac Penthemimer; as

Tu vina Torquato move || *Conſule preſſa meo. Hor. Ep.* 13.

Theſe two are divided in ſome Editions.

An Iambo-Trochaic, called *Saturnian*:

Dabunt malum Metelli || *Nævio Poetæ. Terentian.*

The Hexameter *Meſoperiſſum* (pag. 148.) is divided by *Archilochus* (*Heph.* p. 22) into two *Comma's*, *viz.* 1st. Tetrameter Bucolic; 2d. Trochaic Dimeter, Brachycatalectic.

Eſſus Apoſtolici nobis redit || *Hic dies triumphi.*

The Anapeſtic Dimeter (pag. 153) having only Heroic feet with a midle long Syllable, may be divided into two *Comma's*; the 1ſt. an Heroic Penthemimer, the 2d. an Adonic; as

Heu quam præcipiti || *Merſa profundo!*

Some are not divided into *Comma's* by a *whole* word, but by *part* of it; as

A Trochæo-Iambic.

Tradidit thalamis vir || *ginem relictam. Oedip.* 489.

An Iambo-Trochaic.

Timet aut minaces vi- || *ctoris iras. Agam. v.* 593, 630, 840, 860. and many others.

The Greek Scenics, and Latin Comœdians have other meaſures, and mixtures; as in this Iambo-Trochaic. *Ter.* Andr. Act. 3. ſcen. 2.

Adhuc Arthillis quæ aſſolent || *Quæque oportet.*

For the fixing in memory, and practice of the principal Verſes of every kind; it may ſeem convenient to point out places in the beſt Author, where they are found at large. But firſt obſerve:

A Verſe alone is called a *Monoſtich*; Two only, a *Diſtich*; Three, a *Triſtich*; Four a *Tetraſtich*; Five, a *Pentaſtich*; Six, an *Hexaſtich* &c.

A Monoſtich; as

Pauper videri Cinna vult, & eſt pauper. Mart. l. 8. *Ep.* 19.

A Diſtich; as

Quem recitas, meus eſt, O Fidentine, libellus:
Sed male cum recitas, incipit eſſe tuus. Mart. l. 1. *Ep.* 33

A Triſtich; as

Cogit me Titus actitare cauſas;
Et dicit mihi ſæpe, magna res eſt:
Res magna eſt, Tite, quam facit colonus. Mart. l. 1. *Ep.* 18.

A Tetraſtich. *Caſta ſuo* &c. Ibid. Ep. 14.

A Pentaſtich. *Dederas Apici* &c. *Mart.* l. 3. Ep. 21. &c.

The *Epic* Poets uſe Heroic Hexameters. The *Scenic* commonly Iambics; either Perfect or Imperfect: Trochaics ſcarce any other, but Catalectic. The *Greeks* have more variety.

Heroic.

Hexameter. *Virgil. Arma virumq; cano. &c.*

Hexameter Meſoperiſſus. *Boet. l.* 5. *m.* 5.

Quam variis terras animalia permeant figuris!
Namq; alia extento ſunt corpore, pulveremq; verrunt. &c.

Tetrameter. *Boet. lib.* 5. *m.* 2.

Puro clarum lumine Phœbum
Melliflui canit oris Homerus. &c.

Tetrameter Catalectic. *Prud. Cath. Hym.* 4.

O crucifer, bone, luciſator, Omniparens, pie, &c.

Trimeter Glyconic. *Sen. Med. v.* 75.

Vincit Virgineus decor
Longè Cecropi.as nurus. &c.

Tri-

Trimeter Catalectic. *Auſonius. Profeſs.* 10.

Nunc ut quemq; mihi *Flebilis officii*
Religioſus honor *Suggeret, expediam. &c.*

Dimeter Adonic. *Boet. l.* 1. *m.* 7.

Nubibus atris *Condita, nullum*
Fundere poſſunt *Sidera lumen. &c.*

Elegiac.

Ovids Epiſtles. *Hanc tua Penelope. &c.*

APoem Elegiac, only Pentameters. *Auſon. Sapientes.*

Turpe quid auſurus, Te ſine teſte time.
Vita perit, mortis gloria non moritur. &c.

Anapeſtic.

Dimeter. *Seneca. Med.* Act. 2. Chor.

Audax nimium, qui freta primus
Rate tam fragili perfida rupit. &c.

Dimeter Hypercatelectic. *Boet. l.* 1. *m.* 2.

Heu quàm præcipiti merſa profundo
Mens hebet. &c.

Dimeter Catalectic. *Prud. Cathem. Hym.* 11.

Deus, ignee fons animarum, *Duo qui ſocians elementa,*
Vivum ſimul ac moribundum *Hominem, Pater, effigiaſti.*

Monometer. *Auſon. Prof.* 6.

O Flos juvenum, *Spes læta patris. &c.*

Aſclepiad.

Seneca Med. Act. 1. Chor.

Ad Regum thalamos numine proſpero,
Qui cœlum, ſuperi, quiq; regunt fretum, Adſint. &c.

Alcaic.

Prud. Periſteph. Hym. 14.

Agnes ſepulchrum eſt, Romuleâ in domo,
Fortis puella, martyris inclyta. &c.

Iambic.

Trimeter *Pure. Catul. Car.* 4.

Phaſelus ille, quem videtis, Hoſpites,
Ait fuiſſe navium celerrimum. &c.

Trimeter *Impure. Senec. Medea.*

Dii conjugales, tuque genialis tori,
Lucina, cuſtos; quæque domitorem freti,
Tiphyn novam frenare docuiſti ratem. &c.

Dimeter *Impure. Prud. Cath. Hym.* 2.

Ales diei nuntius
Lucem propinquam præcinit. &c.

Dimeter Catalectic. *Senec. Medea.* Act. 4. Chor.

Quonam, cruenta Manas,
Præceps amore ſævo, Rapitur? &c.

Scazon.

Martial. lib. 1. Ep. 7.

Cur in Theatrum, Cato ſevere, veniſti?
An idco tantùm veneras, ut exires?

Trochaic.

Tetrameter Catalectic. *Senec. Medea. v.* 739.

Vos precor, vulgus ſilentum, voſque ferales deos,
Et chaos cæcum, atq; opacam Ditis umbroſi domum. &c.

Phalecian.

Martial. lib. 1. Ep. 1.

Hic eſt, quem legis; ille, quem requiris;
Toto notus in orbe, Martialis. &c.

Sapphic.

Boet. lib. 2. m. 6.

Vidimus quantas dederit ruinas,

Urbe

Urbe flammatâ, Patribusque cæsis,
Fratre qui quondam ferus interempto,
Matris effuso maduit cruore. &c.

Choriambic.

Tetrameter. *Catullus. Carm.* 31.
Alphene, immemor atque unanimis falsè sodalibus,
Jam Te nil miseret, dure, tui dulcis amiculi? &c.
Dimeter. *Boet.* lib. 4. m. 3.
Vela Neritii Ducis,
Et vagas pelago rates
Eurus appulit insula. &c.

Ionic the Greater.

Sotadic.
Martial. lib. 3. Ep. 27.
Has cum geminâ compede dedicat catenas,
Saturne, tibi Zoilus annulos priores.

Ionic the Less.

Dimeter. *Boet.* lib. 3. m. 7.
Habet omnis hoc voluptas,
Stimulis agit furentes. &c.

Pœonic.

Galliambic. *Catul. Carm.* 64.
Super alta vectus Atys celeri rate maria,
Phrygium ut nemus citato cupide pede tetigit &c.

Glyconico-Pherecratian.

Catul. Carm. 17.
O Colonia, quem cupis ponte ledere longo,
En salire paratum habes, sed vereris inepta. &c.

Divers Kinds in one Poem.

The Lyric Poets delight themſelves in ſeveral compoſures to their Lyre; which they call *Odes*.

An *Ode* commonly contains ſeveral kinds of Verſes, which make a *Staffe* or *Stanza* (Staſimon melos or Staſis in *Ariſtoph.*) In a Staffe each kind is a *Colon*. i. e. a member.

An *Ode* of one kind is *Monocolos*; of two *Dicolos*; of three *Tricolos*, &c,

The *Return* of a Staffe is called *Strophe*. From that Return of the Verſes placed in the Staffe; two, three, or four &c, the *Ode* is named *Diſtrophos*, *Triſtrophos*, *Tetraſtrophos*, &c.

Horace

The Author of the *Latin Ode* and *Glory* of the *Lyrics*, has enriched this kind of Poetry with theſe *nineteen* varieties.

1. Aſclepiad. Monocolos. lib. 1. *Ode*. 1. lib. 3. *Ode*. 30. lib. 4. *Ode*. 8.
2. Three Sapphics with an Adonic. Dicolos, Tetraſtrophos, lib. 1. *Ode*. 2. 10. 12. 20. 22. 25. 30. 32. 38. lib. 2. *Ode*. 2. 4. 6. 8. 10. 16. lib. 3. *Ode*. 8. 11. 14. 18. 20. 22. 27. lib. 4. *Ode*. 2. 6. 11. 18.
3. A Glyconian, and Aſclepiad. Dicolos, Diſtrophos. lib. 1. *Ode*. 3. 13. 19. 36. lib. 3. *Ode*. 9. 15. 19. 24. 25. 28. lib. 4. *Ode*. 1. 3.
4. Hexameter Meſoperiſsus, and Iambic Trimeter Catalectic; Dicolos, Diſtrophos. lib. 1. *Ode*. 4.
5. Two Aſclepiads, a Pherecratian, and a Glyconian. Tricolos, Tetraſtrophos. lib. 1. *Ode*. 5. 14. 21. 23. lib. 3. *Ode*. 7. 13. lib. 4. *Ode*. 13.
6. Three Aſclepiads, and a Glyconic. Dicolos, Te-

traſtrophos. lib. 1. *Ode.* 6. 15. 24. 33. lib. 2. *Ode* 12. lib. 3. *Ode.* 10. 16. lib. 4. *Ode.* 5. 12.

7. Heroic Hexameter, and Tetrameter. Dicolos, Diſtrophos. lib. 1. *Ode.* 7. 28. *Epod.* 12.

8. Two Choriambics; 1st. Dimeter Catalectic. 2d. Tetrameter. Dicolos, Diſtrophos. lib. 1. *Ode.* 8.

9. Two Alcaics, an Iambic Dimeter Hypercatalectic, and a Trochaic Dimeter. Tricolos, Tetraſtrophos. lib. 1. *Ode.* 9. 16. 17. 26. 27. 29. 31. 34. 35. 37. lib. 2. *Ode.* 1. 3. 5. 7. 9. 11. 13. 14. 15. 17. 19. 20. lib. 3. The ſix former *Odes.* and 17. 21. 23. 26. 29. lib. 4. *Ode.* 4. 9. 14. 15.

10. A Choriambic Tetrameter. Monocolos. lib. 1. *Ode.* 11. 18. lib. 4. *Ode.* 10.

11. A Trochaic Dimeter Catalectic, and Iambic Trimeter Catalectic. Dicolos, Diſtrophos. lib. 2. *Ode.* 18.

12. Three Ionics the leſs; Two Trimeters, and one Tetrameter. Dicolos, Triſtrophos. lib. 3. *Ode.* 12.

13. Heroic Hexameter, and Trimeter Catalectic. Dicolos, Diſtrophos. lib. 4. *Ode.* 7.

14. Two Iambics, Trimeter, and Dimeter. Dicolos, Diſtrophos. The ten former *Epodes.*

15. Iambic Trimeter, and Elegiambic. Dicolos, Diſtrophos. *Epod.* 11.

16. Heroic Hexameter, and Iambelegie. Dicolos, Diſtrophos. *Epod.* 13.

17. Heroic Hexameter, and Iambic Dimeter. Dicolos, Diſtrophos. *Epod.* 14. 15.

18. Heroic Hexameter, and Iambic Trimeter. Dicolos, Diſtrophos. *Epod* 16.

19. Iambic Trimeter. Monocolos. *Epod.* 17.

Beſides

Beſides theſe Combinations in *Horace*, there are found ſome in other Latin *Authors*.

Catullus.

Three Glyconians, and a Pherecratian. Dicolos, Tetraſtrophos. *Diana ſumus &c. Carm.* 35.

Auſonius.

Two Heroics; 1ſt. Tetrameter, 2d. Catalectic. Dicolos, Diſtrophos.

Te quoque Dryadiam &c. Parental. 25.

Two Anapeſtic Dimeters, and an Adonic. Dicolos, Triſtrophos. *Tu quoque in ævum &c. Profeſſ.* 21.

Prudentius.

Three Choriambics; 1ſt. Dimeter. 2d. Trimeter. 3d. Tetrameter. Tricolos, Triſtrophos.

Per quinquennia &c. Cathem. Hym. 1.

The reſt, in this Author and *Boetius* following, are Dicola Diſtropha.

Trochaic Dimeter, and Dimeter Catalectic.

Da puer plectrum &c. Cath. Hymn. 10.

Iambic Trimeter Catalectic, and Trochaic Dimeter Catalectic. *Pius, fidelis &c. Enchir. Hymn.* 1.

Boetius.

An Aſclepiad, and Pherecratian.

Si quantas &c. lib. 2. m. 2.

A Sapphic, and Glyconic.

Cum Polo Phœbus &c. lib. 2. m. 3.

Iambic Dimeter Catalectic, and Pherecratian.

Quiſquis volet &c. lib. 2. m. 4.

Iambic Trimeter, and Elegiac.

Quamvis fluente &c. lib. 3. m. 3.

Phaleucian, and Dimeter Trochaic.

Quamvis ſe Tyrio &c. lib. 3. m. 4.

Heroic Tetrameter Catalectic, and Pherecratian.

Quæ ne hominum genus &c. lib. 3. m. 6. Aſ-

Asclepiad, and Iambic Dimeter.
Eheu quæ miseros &c. lib. 3. m. 8.
Phaleucian, and Sapphic.
Huc omnes pariter &c. lib. 3. m. 10.
Heroic Tetrameter, and Iambic Dimeter.
Sunt etenim pennæ &c. lib. 4. m. 1.
Trochaic Dimeter, and Pherecratian.
Quos vides sedere &c. lib. 4. m. 2.
Phaleucian, and Elegiac.
Quid tantos juvat &c. lib. 4. m. 4.
A Trochaic Penthemimer with an Adonic; and an Iambic Penthemimer with an Adonic.
Siquis Arcturi &c. lib. 4. m. 5.

¶ There is also a Combination of various Verses with Arbitrary measures, sung at the Orgies of *Bacchus*; called a Dithyramb: Applied by *Pindar* to the Græcian Games: and used by *Seneca* in his *Chori*.

A Dithyramb.

Effusam redimite comam nutante corymbo, Hexam.
Lucidum Cœli decus, huc ades votis, Troch. Catalect.
Quæ tibi nobiles Thebæ, Bacche, tuæ Ascl. Hyst. prot.
Palmis supplicibus ferunt. Glycon.
Vultu sidereo discute nubila Asclepiad.
Deodumque fatum. Te decet, vernis comam Iambic.
Cingi floribus: Hexamet. Dimet.
Te caput Tyriâ cohibere mitrâ, Sapphic Dactyl.
Edere ac mollem Bacchiferâ Iambic Dimet. Anapæst.
Religare frontem. Iambic Monomet. Hypercatalect.
Senec. Oedip. Act. 2. atque alibi, Agamemn. Act. 4.

A Poem

From the Argument or matter hath divers names.

Heroicum. *pag.* 147. Elegiacum. *pag.* 150.
Genethliacum, *upon a Nativity.*
Epithalamium, *upon a Marriage.*
Epicedium, *upon a Funeral.*
Epitaphium, *upon a Sepulchre.*
Satyra, *a sharp Poem.*
Panegyris, *a public Commendation*; Encomium, *a more private.*
Epinicium, *upon a Victory.*
Idyllium *or* Bucolicum, *a Pastoral Verse*; Georgicum, *a Rural.*
Epigramma, *a short and witty Poem.*
Tragœdia, *a Scenic Poem personated by Heroes*; Comœdia, *by Plebeians.*

THESE RUDIMENTS may seem sufficient for the first Essay to an English Institution of the Latin Grammar. And it is desirable that the ENGLISH GRAMMAR might be perfected for the NATIVES: it being unreasonable that the Principles of an unknown Language, should be taught in an unknown Tongue; and that the Learner should be supposed to understand, what he is going to learn because he does not understand it.

The

Rudimentum Grammaticæ METRICUM.

GRAMMATICE docet *Ars*, Humanæ *Elementa* loquelæ; *Consona* bis septem numero, *Vocalia* quinque: *Græcula* trina *y, z, x. H* spiratio *tantùm* est.

Formam Literulæ *rectam* facit ORTHOEPEIA. Facta ex literulis, quotuplex sit *Dictio*; quot sint *Casus*, & *Numeri*, & *Genera*; & quot *Tempora*, quotque *Personæ*, quot sintq; *Modi*; ETYMOLOGIA dicit, Quid, *Regimen*; vel quæ sit *Concordantia* vocum; SYNTAXIS: Qualis *Tonus*, aut *Extensio* quanta; Quis sit item *Versus*, quotuplexque; PROSODIA monstrat.

Etymologia.

NOMEN.

Declinationes quinque.

Formis quinque suos inflectunt Nomina casus: *-Æ* dat *Prima*. *Secunda*, dat *-i*. Sibi *Tertia* vult *-is*. *Quarta* dat *-ûs*. Dat *-ei*, Genitivo, flexio *Quinta*. Parturit has ambas *contracta* Tertia *forma*.

Genera Nominum.

1°. Ex significatu.

Nomina, *Mas* quibus exprimitur vel *Famina*, sexu A simili *genus* accipiunt; ut *Scævola*, *Dido*.

Vox, *utriusque* capax *sexûs*, *communis* habetur: Cui genus, ut proprii sexûs sit mentio, certum est; Nempe *homo*, *bos*, *canis*, *ales*: & hujus plura farinæ.

2°. Ex terminatione.

Famina, vox in *-a*, *Prima* est. *Mas*, *-us*, *-er*, *-ir* que, *Secunda*; *-Um*, *Neutrum*. *Fines* penè omnes, & *Genus* omne, *Tertia*. *-us* est, *Mas*. *Quarta*; *-u*, *Neutrum*. *-es*, *Famina*, *Quinta*.

Faminea est in *-us*, *Urbs* aut *Insula*, *Gemma* vel *Arbor*. Seu *Mons* seu *Fluvius*, muliebri fine, Poetis *Mas* est: Vox & in *-um*, per Synthesin, est *muliebris*.

Genera

Genera & Terminationes *Tertiæ* Declinationis.

Maſcula ſunt *-er, -or, -os, -o*; *venter, mos, honor, ordo.*
Faminea, impurum *-s, -x, -aus, -as*, ferè & *-es, -is*;
Et *verbale* in *-io*; & *polyſyllabon* in *-do*, vel in *-go*;
Mens, pax, laus, pietas, nubes, lis, dictio, arundo, ſiligo.
Hæc, *-e, -ma, -t, -l, -c, -ur, -en, -us*, vel *-ar*, omnia *Neutra*;
Rete, poema, caput, mel, lac, jecur, omen, onus, far.

Genera Nominum *Græco-latinorum.*

Græco-latina genus ſuæ originis omnia ſervant.
Mas, vel in *-as* vel in *-es*, ſed in *-e* vox, *Famina, prima* eſt.
Vox quoq; ab *-as*, vel ab *-es* primæ, per *-a* reddita, *Mas* eſt.
Mas & in *-eus* & in *-os*; ſed in *-on* vox, *Neutra, ſecunda.*
Mas ferè in *-an, -en, -in, -on, -es, -ûs*; eſt & in *-as, -is*,
Tertia. In *-o* formæ vox omnis, *Famina, Quarta.*

Exceptiones ad genera Nominum.

1°. Maſculina *aliena* terminationis.

Maſcula, neutro fine; lien cum pectine, ren; ſol;
Furfur, item turtur, vultur; ſalar; & lepus, & mus.

Famineo; dens, fons, mons, pons, mas, vas vadis; ames,
Pes, ceſpes, fomes, gurges, cum limite, merges,
Præs, paries, palmes, poples, ſtipesque, tudesque,
Termes, trames: *meridies*, vox unica *quinta.*
Callis, caulis, collis, follis, menſis, & enſis,
Faſcis, fuſtis, piſcis, poſtis, ſentis, & unguis,
Et torris, vectis, vermis, ſimul orbis, & axis:
Et vox in *-nis*; ut *ignis.* Item ſanguis, lapis, & glis.
Dicatalecta *-il, -ilis*; vel *-is, -er*; cum *mugile, vomis.*
As, cum *compoſito* vel *parte*; ut *centuſſis, bes.*
Nomen in *-unx* pariter, quod parturit *uncia*; *quincunx.*
Caudex, codex, cimex, murex, grexque, frutexque,
Atque latex, podex, pollex, pulexque, culexque,
Ramex, & ſorex, & apex, vertexque; calixque,
Et fornix; tradux: plura his dat *varior* uſus.

2°. Fæminina.

Faminea hæc; humus, *-i*; tribus, *-ûs*; ſic porticus, idus,
Sic acus, & manus: unica ſed *domus -i* facit aut *-us.*

Additur

Additur his caro: vox simul in *-lis*, quæ venit ex *-lis*:
Arbor; cos, dos: cum tellure, salus, palus, incus;
Vel quam format in *-us*, *juvenis*, *vir*, cum *senex*, *servus*.
3°. Neutralia.
Neutra hæc, suber, acer, siler; adde cadaver, & uber,
Et laser, cicer, & piper, & siser, atq; papaver,
Tuber, iter, ver; æquor, ador, cor, marmor; & æs; os;
Vas vasis. Vox & casu *invariabilis*; ut *fas*.
4°. Communia.
Mascula præcipuo ex usu, *muliebria* raro;
Cuncta, quibus *mulier* fungi sit dicta *virili*
Arte vel *officio*; ceu *vates*, *civis*, & *exul*.
Vox composita in *-a*, *-ceps*, *-cen*, *-r*, *-x*, edita verbo;
Agricola, *princeps*, *tibicen*, & *augur*, & *auspex*.
Sic & nomen in *-es*, quod profluit ex *sedeo*, *sto*,
Aut *eo*; *Præses* ut, *antistes*, *comes*: ex *do*; *sacerdos*.
Sæpe Poeta *genus variat*, vel pervetus Author:
Mascula; adeps, finis, torquis, pulvis, cinis, anguis,
Vepres, linter, margo, rudens, scrobs, pampinus, obex,
Cortex, & varix: Hæc *femina*; ut colus, alvus,
Corbis, carbasus, & rubus, imbrex, luxque, silexque:
Plura *utriusque* notæ, genera in diversa feruntur.
Adjectiva trium generum sunt. Pauca duorum;
Qualia in *-es* sunt; ut *locuples*: neutralia rarò.
Fœmineum in *-trix*, plurali quoq; in ordine, neutrum est.

Variatio GENITIVI in tertiâ Declinatione.

Tertia dat *varios Genitivi* inflexio *fines*.
Nomina, *fine* quibus *c*, *l*, *n*, *r*, capiunt *-is*.
-Is crebrò manet: *-es*, vel *-e*, *comparisyllabon -is* fit.
Impurum -s, *-tis*: glans, *-dis*: frons, lensque, *-tis* & *-dis*.
Purum -s, non pauca solent inflectere, per *-tis*;
Qualia in *-as*; *pietas*: lis; cos, dos; nomen & in *-pos*;
Ut *compos*: & in *-es*; abies, arietsque, quietsque,
Interpres, paries, seges, & teges: adde salus, &
Quod sibi in *-us*, *Juvenis*, *servus*, *vir*, cum *senex*, format.
Præpes, hebes, locuples, teres, & veges, *Adjectiva*.
Græcum in *-a*, *-tis* capit; ut *problema*, *-tis*: adjice, lac, *-tis*.

Pes,

Pes, merces, hæres; caſſis, cuſpis, lapis, in *-dis*;
Præs itidem; cuſtos; fraus, laus, incuſque, paluſque.
Multa ſed *-es*, per *-itis* variant; velut ales, & ames,
Ceſpes, cocles, eques, fomes, cum gurgite, limes,
Et merges, miles, palmes, popleſque, pedeſque,
Et ſtipes, termes, trames, tudes, atque ſatelles,
Veles. Item comes, hoſpes, dives, ſoſpes: & in *-ſtis*
A ſto: *-ſes*, *-ſidis* a ſedeo: ſic *-cors*, uti cor, *-dis*.
S poſt *b*, *m*, *p*, medium (*i*) locat; ut *trabis*, a *trabs*;
Poſt *c*, *g*, *clauſum* in *-x* (quod vox *primula* monſtrat);
Dux veluti *ducis*, a duco; *rex*, a rego, *regis*.
-Ebs, ſimul *-eps*, ferè & *-ex*, ſi vox monoſyllaba non ſit,
Vocalem (*e*) permutat in (*i*); velut *auſpicis*, *auſpex*.
Excipe ſed vervex verveçis; & aucupis auceps.
Compoſita a *Capite*, ut *præceps*, *anceps*, *-cipitis* dant.
Effert, *-us* per *-itis*, ſimplex vel dictio complex.
Per *-ris*, *-s* variant flos, mos, os, ros; Ceres, æs, glis,
Mas, tellus, mus; et monoſyllaba neutra in *-us*; ut *rus*.
Flectitur *-us* per *-ŏris* neutrum; ut corpuſque, decuſque,
Fænus, item facinus, frigus, littuſque, nemuſque,
Et pignus, pectus, pecus, & cum ſtercore, tempus.
Sic tria, robur, ebur, femur: Unica vox *lepus* eſt mas.
-Us ſed ab *Adjectivo* omni, quod *comparat*, *-ŏris*.
Non pauca inflectunt *-us*, *-eris*; ceu fœdus, acuſque,
Funus, onus, genus, & munus, pondus, latus, ulcus,
Rudus, olus, cum ſidere, opus, cum viſcere, vellus,
Et vulnus, ſcelus: adde Venus, pulviſque, ciniſque.
Verte *-ter* in *-tris*; ut *accipiter*: *-ber* & in *-bris*; ut *imber*.
Græca duo *mater*, *pater* in *-tris*; cætera in *-teris*.
Perdit *e*, ſi *celer* excipias, in *-er* Adjectivum.
Accipit *-o* ſibi *-nis*; ſed poſt *d*, *g*, fit *-inis*; ſic
Flecte homo, turbo, & Apollo: quod inq; *-men* exit, & in *-cen*:
Et gluten, pecten, pollen: ſanguis, caro carnis.
As, os, *-s* geminat; grus, ſus, *-s* perdit; ut as, *-ſis*;
Grus, gru *-is*. His far, ſel, mel, ſe ſua conſona duplat.
Denique quinque; ſenex, nox, nix, & Jupiter, & bos;
Rite ſenis, noctis, nivis, & Jovis, & bovis, edunt.

Hete-

Heteroclita.

Vox HETEROCLITA triplex eſt. 1. Vox ſine *Redundans*. 2. *Deficiens* Caſu, aut Numero. 3. *Varians* ſibi flexum.

Redundantia.

1°. In Nominativo.

Multiplices recti fines opulentia linguæ
Parturit; ut *lanio*, *lanius*; ſic *cantio*, *cantus*;
Segnitia, *-es*; *labor*, *-os*; *rubor*, *-edo*; *ſenecta*, *ſenectus*;
Emenda, *-um*; *baculum*, *-us*; *tonitruque*, *-us*; *veſpera*, *veſper*.
Græca ſibi fines geminant mutata Latinis;
Delphin, *delphinus*: *caſſis* quoque *caſſida* gignit.
Migrat enim in rectum quartus caſuſque ſecundus.
Formam *Adjectivis* dant *Subſtantiva* gemellam;
Qualia in *-us* vel in *-is* ſimul, ex ſe nata, *bacillum*,
Arma, *jugum*, aut *animus*, *nervus*, vel *frana* dederunt.

2°. In obliquis.

Nomina ſunt etiam obliquos geminantia caſus:
Laurus in *-i*, rarò *-ûs*; ſic *pinus* flexa Maroni.
Quercus in *-ûs*, rarò *-i*. *Colus*, *-i*; ſed Statius *-u* dat.
Jecinoris, *jecoriſque jecur*. Plura edita Græcis;
Singula queis formam generalem exempla miniſtrant:
Atrides *-is*, & *-a*; ſed *-is*, *-i*, vel *-ei* dat Achilles;
Androgeos facit *-i* ſimul *-o*; Chremes, *-is*, & *-etis*;
Dido *-onis*, & *-ûs*; Phyllis vult Phyllidis, & *-dos*;
Theſeus vel per *-ei*, vel *-eos*, finit *Genitivum*:
-M vel *-n quarto*, Æneas; vel *-a*, Pallas, & Orpheus
Flectit; & *-â* ſimul *-ê*, *quinto ſextoque* Thyeſtes:
Ultima forma placet Græcis, ſed prima Latinis.
A *feſto* in *-lia*, fit *Genitivus -ium* vel *-iorum*.
Gaudent *-abus* & *-is*, dea, filia, nata, equa, mula.
Perque *-tibus* vel *-tis*, *-ma* licebit flectere *neutrum*.

Deficientia.

1°. Caſu. Aptota.

Aptoton caſus manet *uno fine* per omnes;

Ut

Ut nequam, pondo; & vox *barbara*, *technica* ceu vox.
Tot, quot; & a *tribus* ad *centum* numeralia cuncta.

Monoptota.

Contentum *casu* Monoptoton flectitur *uno*;
Ut nauci, inficias *eo*, *ad* inci-*que*-tas *redigo*, sic
Ingratiis, expes; duo græca *ergô*que, *dicîs*que,
Macte simul primo numero, *macti*que secundo.
Multa per -*u* vel -*ui* dat declinatio quarta.

Diptota.

Nomina sunt Diptota *duos* referentia *casus*;
Nil; quid; opus: spontis sponte; impetis impete; tabi
Tabo; jugeris & sibi jugere, verberis & vult
Verbere: sed numero hæc duo sunt perfecta secundo.
Suppetiæ dant suppetias: *dica* græca, *dicam*, -*cas*.

Triptota.

Tres casus Triptota ferunt. Hæc *fine* sub *uno*
Singula; fas, volupe, instar, cæpe, necesse, necessum,
Sal, pelagus, virus, vulgus, neutralia flexu.
Grates; & *cete*, & *Tempe*, *Pluralia* tantùm.
Tantundem in casu *tantidem* flecte secundo.

Tetraptota.

Hæc *recto* & *quinto* Tetraptota carentia *casu*:
Nempe dapis, ditionis, opis, frugisque, precisque,
Et pecudis, sordis, vicis; ordine sana secundo.
Vox & in -*u*, *dandi casu* caret, & (nisi Vates
Flectat in -*ûs*) *genito*; *gelu* & excipe, sana secundo.
Mille dat -*i* sexto; pariter vox sana secundo.

Pentaptota.

Integra sunt, nisi *quinto* solum expertia *casu*:
Quod *negat*, ut *nemo*; quod *percontatur*, ut *ecquis*?
Infinitum, *aliquis*; quod *distribuit*, velut *omnis*.
Pronomen; præter *noster*, *nostras*, *meus*, & *tu*.

2°. Numero.

Singularia.

Propria sunt numerum vix excedentia primum,
Signa *individuæ naturæ*; ut *Nestor*, *Elisa*.
Nomen item *vitii* polysyllabon, aut *virtutis*:

Et

it quod in *-as* vel *-ia*; ut *caritas*, *opulentia*: in *-esque*,
flexuræ quintæ, ut *rabies*: sed *réfque diéfque*
integra nomina sunt; *similes* nec paucula *casus*
Tres flectunt numero, ut *facies*, *aciésque*, secundo.
Humana ætatis quoque signa; *juventa*, *senectus*:
Aut quot in *-um* sunt signa *metalli*; qualiter *aurum*;
Aut *fructus* nati e terrâ; ut *cicer*: aut *liquor*; ut *lac*.
Plura his Grammatici adnumerant; sed fide * *Tabella*.

Pluralia.

Festa deûm, numero tantùm contenta secundo;
Ut *Floralia*: sic etiam *loca* multa; ut *Athenæ*.
Singula, sed numero quæ manca leguntur utrovis,
Nomina * *Catalogus duplex* collecta ministrat. • vide pag. 18.

Varietas.

Sub his Heteroclitha censeri possunt, vel Heterologa.

1. Flexum.

Sunt quæ duntaxat *variant*, Heteroclita, flexum.
Propria vox in *-ius* deponit *-ii*, ordine quinto:
Sic vox *filius*. Una *deus* vox, o *dei*, effert.
Flumina in *-is*, *quarto* vel *sexto*, non variant (*i*):
Hæc neque quinque; fitis, ravis, vis, tussis, amussis.
Multa *per* (*i*) pariter veniunt a *carminis usu*;
Qualia sunt *clavis*, *navis*, *febrisque*, *cutisque*.
Sexto etiam flectunt *-i Neutra* in *-al*, *-ar*, vel *-e*; præter
-E proprium: adde jubar, far; Græca & *nectar* & *hepar*.
Audent *-i* vel *-e* prolibitu variare Poetæ;
Ut *mare*, & *occipiti*. *Monolecta* hæc Adjectiva,
Pauper, dives, sospes, *-e* solum; sed memor *-i*, dat.
Sextus in *-i*, *Neutris*, *-ia*, *-ium* pluraliter edit;
Imparum -x vel *-s*; vel parisyllabon *-es*, *-is*
Flectit *-ium*; ut *merx*, *mons*, *nubes*, *pistis*: simul as, bes,
Vas vadis, os, glis, lis, vis, cor, nix, nox, caro, mus, plus.
Excipe in *-um* composta per *-ebs*, *-eps*, *-ops*, *-fex* & *-spex*:
Sic quoque hyems, vates, juvenis, panisque, canisque.

Et memor, & vetus; &, quod *comparat*, Adjectivum.
Lectio plura dat, a quibus *(i) melior sonus* aufert.
Ista *boum*, *bobus*, medium *v* quod *servit*, omittunt.
Vis, vires; primo vix invenienda dativo.

2°. Genus.

Paucula eum numero *variant* genus; altera *duplant*.
Halec *famina*, vel sal *mas*, *neutralia* fiunt
Pro *condimento*. Virus, vulgus, pelagusque
Primo *neutra*, & *mascula* sunt; *numero* orba *secundo*.
Communisque dies *generis*, *Pluraliter* est *mas*.
Carbasus ut dat carbasa, sic urbs Pergamus, & mons
Taygetus; plura & Græcæ *Loca* anomala Gentis.
Postulat *-i*, *cœlum*, si vox sit *plurima*. *Rastrum*,
Frænum, *sibilus*, & *jocus*, & *locus*, *-i* vel *-a*, præbent.
Neutra hæc; *Nundinæ*, & hinc *epulæ*, inde & *balneæ*, & illinc
Delicium, poscunt *-a*: vox quoque *balnea*, in usu est.
Hæc duo flecte trium generum *penus*, & *specus*; ut vis.
Una supellex, *-ectilis*, *-ectilia*, absona flexu est.

HETEROLOGA; quæ variant

1°. Significationem.

Est quæ cum *numero* mutat, vox ceu nova, *sensum*;
Ut *rostrum*, *fortuna*, *facultas*, *mos*, *opis*, *ædes*.

2°. Genus & Significationem.

Nomen idem mutare *genus* mutabile *sensu*
Sæpe solet; *calx*, *unio*, *anus*, *stirps*, *ficus*, *acus*, *vas*.

HETEROSTOICHA; quæ variant Vocalem, in Compositione.

Simplex Composito vocalem in Nomine mutat;
Ut fit *Jupiter*, a *pater*; & fit *inermis*, ab *arma*.

Verbum

VERBUM.

Conjugationes quatuor.

Quatuor ad formas Verbum sua tempora flectit.
Judat Prima. Secunda dat *-as.* *-es* Tertia. Quarta *-is.*
Conjugat, *-O* Verbi omnis in *-IS*, formatio *SIMPLEX:*
Sola triplex *triplicem* reddit *CONTRACTIO finem.*
Ut *-aïs, âs; -eïs, -ês; -iïs, -îs*; sine complice *prima, -io:*
Quam malè *contractis* imm sœet tertius ordo.

Ratio Contrahendi.

Sive Variatio Formæ Contractæ a Simplici.

Non multum absimile est Græco paradigma Latinum:
Post *-a* silent *-i*, vel *-u*, vel *-e*: par contractio, post *-e:*
Post *-i* perit *similis*; sic *nuda -e*; vel, ante *-re, clausa:*
Contrahe *-ao, -ô*; sed *-aa, -â.* Forma *inconiracta* sine usu est.

Formatio Perfecti Temporis.

1. VERISIMILLIMA:
Perfectum demit *Thematis (-s)* sine secundo;
Ut *-is* ut *-i*: Tria *servile -v* vocalibus indunt;
Ut *-aïs* ut fit *-aï, -avi.* Sed *sententia vulgi*
Imperat ex casu contracto ducere tempus.
2. POPULARIS:
-i breve transit in *-i*: Forma *una* hæc sparsa per *omnes.*
-as contractum ab *-aïs*, Perfectum format in *-avi:*
-Eis ab *-eïs*, per *-ui*; *-Is* ab *-iis* bene flecte per *-ivi.*

Formatio Perfecti Compositi.

Compositum ut Simplex inflectit quilibet ordo.

HETEROSTOICHIA Perfecti.

In 1ª. Conjugatione.

CONSONA mutatur: *-go, -cto*, vel *-bo*, vertitur in *-xi:*
Junge quibus coquo, dico, duco, struo, fluo, vivo,
Deme *lego, -i.* Spargo, mergo, tergo; simul ista
Claudo, lædo, ludo, plaudo, divido, rado,
Rodo, trudo solent *-go* vel *-do* reddere per *-si.*
Mitto, misi. Uro, gero, cedo, premo geminant *(s).*
-Po fit *-psi*; duo nubo, scribo; quatuor in *-mo,*
Como, promo, demo, sumo, ita *-psi* sibi formant.

-Sco, -no, -vi faciunt; *noſco* -ut *novi, fino ſivi.*
Sperno ſolet ſprevi, ſterno ſibi poſcere ſtravi.
Pono vult poſui, genui (*ex gano*) flectere gigno.

VOCALEM i mutant pauca hæc Perfecta *ſupremæ*
-I fit *-ui* poſt (*l*) *Simplex*: Sic *-i*, fremo, pinſo,
Sterto, gemo, ſtrepo, tero, tremo, vomo, vertere gaudet
Vult & *-ui* rapio & ſapio; meto, meſſui habere.
Hæc *-ivi* pariunt, arceſſo, capeſſo, lacceſſo,
Et cupio, peto: quæro quæſivi, tero trivi.

CONSONA mutatur *prior*, aut *VOCALIS* in iſtis:
Findo, fundo, linquo, ſcindo, vinco ſuum (*n*);
Rumpo (*m*) perdit; Frango vult reddere fregi,
Quin & ago, capio, facio, jacio, (*e*) parit ex (*a*).
Multa hîc Verba *duas* gaudent geminare *priores*;
Qualia curro, poſco, pedo, pendo, tendo;
Dempto (*s*) diſco, (*n*) pungo; Septem adhibent (*e*);
Cum *medio* (*i*) cado, cædo, cano; tango, tetigi vult:
Cum *medio* (*e*) fallo, pario; pello, pepuli dat.
Syllaba negligitur *duplæ* raro; ut —— *retia tendi.*
Siſto ſtiti retrahit (*i*), verſum in (*ſ*), velut ex *ſto.*

In 2da Conjugatione.

-As ſibi formæt in *-i* lavo, ceu lavi; juvo, juvi.
Dat crepo, *-ui*; domo, *-ui*; frico, *-ui*; mico, *-ui*; ſeco, *-ui*
Sic ſono, *-ui*; tono, *-ui*; veto, *-ui*. Do, dedi; ſto, ſteti vult.

In 3^tia^ Conjugatione.

-Es facit *-i*, poſt (*v*). Fleo, vel neo, ab *-es* facit *-evi*.
Prandeo, item ſedeo, video vertunt *-deo* per *-di*.
Pendeo habere pependi, mordeo vultque momordi;
Spondeo habere ſpopondi, tondeo vultq; totondi.
CONSONA mutatur; *-geo* ut *impurum* cadit in *-ſi*.
Ardeo, rideo, ſuadeo, vertunt hæc *-deo* per *-ſi*:
Hæreo & hæſi; mulceo mulſi, torqueo torſi,
Vult maneo manſi: jubeo vult flectere juſſi.
Augeo, frigeo, luceo, lugeo parturiunt *-xi*.

In 4ta Conjugatione.

-Is fit in his, *-i*; ceu venio vult flectere veni:
Impurum *-cio*, *-ſi*; poſt (*n*) *-cio* vertitur in *-xi*;

Sem

Sentio vult sensi, hausio & hausi, sepio sepsi:
Amicio amicui; salio (*salto*) saliique.

HETEROSTOICHIA Thematis in Composito.

Vocalem (*a*) mutant Præsentis in (*e*) sibi carpo,
Fallo etiam, scando, spargo, pario; patro, capto,
Damno, sacro, jacto, lacto, tracto; arceo; farcio:
Partior, & gradior. *prisca* & duo *cando, fatiscor.*
Juro, dejero, pejero; & halo, format anhelo.
Mando *-as*, commendo; patior sic perpetior vult.
Vocalem primam præsentis in (*i*) sibi mutant
Cædo, lædo, quæro, cado, rapio, cano, tango,
Et sapio, statuo; atque egeo, lateo, taceoque,
Et teneo; salio: Atque habeo, si demitur unum
Posthabeo: a placeo, sed *displiceo* additur unum.
Hæc sed ago, capio, frango, jacio, premo, pango,
Et rego, emo; sedeo; *prisca* & *lacio*, *specioque*;
Et fateor; cum *praposito* & facio; Omnia primam
Vocalem *thematis*, non *perfecti*, per (*i*) mutant.
Adde lego; si non præeat *per*, *præ*, *re*, *sub*, aut *trans*.
Aufer ab his *Composita*; supersedeo, coëmoque;
Circumago, cogo, dego, perago, satagoque;
Oppango, circumpango, depango, repango.
Syllabicum abjiciunt pergo, surgo, *thematis* (*re*).
A calco, salto, Composita per (*u*) variant (*a*).
Perdunt (*a*) facta ex causo, quatio, lavo, claudo:
Facta ex plaudo per (*o*) diphthongum reddere maluit:
At *relavo*, *applaudo*, retinent sibi Simplicis usum.

HETEROSTOICHIA Perfecti Compositi.

Compositâ perit in formâ *geminatio* Verbi
Simplicis: exceptis a disco, posco, creatis.
Composita a cano perfectum per *-ui* bene vertunt.
A pario *-perui*: sed *con-*, *re-*peri; quasi Simplex.
A pasco duo, *con-*, *dis* -posco, -pescui habebunt.
A pungo pupugi vult Compositum dare, -punxi;
A lego sic intelligo, diligo, negligo, -lexi.
A do flecte -didi; fuerit quasi formula prima:
Præterquam *venun-*, *pessun-*, *circun-* do, satisdo:
Abscondo facit abscondi. A sto nata, -stiti dant.

For-

Formatio Supini.

-I fit *-tum*; dempto (*u*); redit (*a*); *geminatio* nulla fit.
Ici, *ictum*; ſcivi, *ſcitum*; cecini a cano, *cantum*.
G, q, x prope *-tum* in (*c*) vertitur; ut le *-go*, le *-ctum*.
V, x ſerva perit, *radix* manet; ut cav *-eo*, *-tum*;
Tex *-o*, *-tum*. Perit in moveo, voveo, juvo, *radix*.

Formatio Supini Compoſiti.

Compoſitum, ut Simplex, ſua dant Perfecta Supinum;
Inſpergo ſolet inſperſum, ut ſpargo dare ſparſum:
Inficio ſimul infeci, infectum bene format.

HETEROSTOICHIA Supini.

CONSONA mutatur multis *poſtrema* ſupinis.
-Di, *-li*, *-ri*, vel *-ſi*, formant *-ſum*: quinque duplant (*s*);
Nempe fidi, fodi, miſi, ſedique, ſcidique.
Dat pepuli pulſum: a peperi dat *regula* partum.
Poſt *p*, *-ſi* format *-tum*: Sic etiam uro, geroque;
Sic indulgeo, torqueo; fulcio, farcio, ſarcio.
Figo, flecto, necto, pecto, plecto, fluo, *-xum*.
Fingo, mingo, pingo, ringo, ſtringo, adimunt (*n*).
VOCALEM mutat paucis nova forma Supinis.
Quod dat *-ui*, dat *-itum*; ut gemo, *itum*: Sed *regula* princeps
Excludit rapio, occulo, conſulo, texo; fricoque,
Et ſeco; item docco, teneo; amicio, ſalioque.
-I per *-itum* variare volunt fugio, bibo, pedo.
Verba in *-uo* extendunt *-utum*; ruo ſed breve *-utum* dat.
Solvi a ſolvo ſolutum, volvi a volvo volutum.
Rara hæc: verſo *-ui* in *-um*, meto meſſum; cenſeo cenſum,
Verto fit verſum; paſco, paſtum; colo, cultum;
Mulgeo, mulctum; torreo, toſtum; vœneo, vœnum:
Haurio vult hauſtum; vult ſepelioque ſepultum.
A do, datum; a ſto vel ſiſto, commune ſtatum fit.
Flecte citum a cico breve; ſed citum a cio longum.

HETEROSTOICHIA Supini Compoſiti.

Diverſam a propriâ, formam ſibi Simplicis optant
Hæc; ago, frango, cado, pango, tango; ſedeoque.
Sic facio, niſi *præpoſitum* cum ſimplice jungas.
Flecte didi, -ſevi, -ſtiti, *-itum*; ex his, do, -ſero, vel -ſto.

Hæc

Hæc vocalem (*i*), cano, rapio, teneo, per (*e*) mutant.
Ut salio sibi -*sultum*, adolesco gignit *adultum*:
Nosco duo tantum sibi *cognitum* & *agnitum* habebit.
Neco amat -*nectum*, neco sed formare *necatum*.

HETEROSTOICHIA Infinitivi.

Flectitur ex orior modus Infinitus in -*iri*.

Verba Heteroclita.

Redundantia.

1°. In Præsenti.

Verba eadem, non fine uno; ut sunt *stridéo*, *strido*.
Plura unam referunt formam, contraria sensu;
Ut *légo*, *lego*: sic a fulgeo, fulcio, *fulsi*.
Sumit *edo* pauca a verbo *sum* tempora: formæ
Quartæ autem *potior* trahit ad se tempora primæ.

2°. In Perfecto.

Alino, lini, livi, levi; a pango *paciscor*,
Fit pepigi; pro *jungo*, pegi; pro *cano*, panxi.
Flecte sero (*pono*) serui, sero (*semino*) sevi.
Non pauca *Analogam* patiuntur *Anomala* formam:
Nempe lavo interdum facit -*avi*; sancio, -*civi*.
Linguæ *Archaismo* defende *Idioma* Latinum:
Forma vetus *parsi*, sed in usu est parco peperci.
Perfecto Activo Passivum affingere mos est;
Juro ut juravi, *juratus*; prandeo prandi,
Pransus sum: sic plura hujus *verbalia* sortis:
Præterito sed *utri*que est significatio *dispar*.
At libuit, libitum a libet; & licuit, licitumque
Alicet; & piguit, pigitum; puduit, puditumque;
Tæduit & pertæsum: *Uno* vox *utra*que sensu.

3°. In Supino.

Præteritum Simplex duplicat quandoque Supinum;
Miscui enim mistum, vel mixtum; alui altum, alitumque;
Tendo tensum, & tentum; pando pansum, & passum;
Pinso etiam pistum, pinsum, vel pinsitum habebit.
Dísce satum a sevi, a -*serui* producere -*sertum*.

Composita Redundantia.

1°. In Præsenti.

Flexio Compositi interdum cum *fine* novatur;
Aspecio -*spicio*, & -*spicor*; a plecto, -*ctor*, & -*exor*. 2°. In

2°. In Perfecto.

Compositum a plico, quod neq; *sub*, *re*, præit; neq; *nomen*
Flectit -*ui*, aut -*avi*: quibus increpo, discrepo junge.
A salio (*salio*) veniunt -*silii*, -*silui*que.
A vello, -*i*, vel -*vulsi*; a necto -*xique*, -*xuique*.
Ex, *de*, *pra*, -*curri* -curro, pariterque -*cucurri*.
Deque oleo *ad*, *re*, *sub*, *ob*, *per*, *in*, *ex* -*olui* vel -*olevi*;
At parcè *per*, *in*, *ex*, dat -*ui*; parcè *ob*, *re*, *sub*, -*evi*.

3°. In Supino.

Præteritum quandoque duplex duplicare Supinum
Assolet; *explico* ut *explicitum* facit, *exque* -*plicatum*.

4°. In Infinitivo.

Dat *morior* plerunque *mori*, quandoque *moriri*.

Defectiva.

1°. Themata, quorum Composita in usu sunt.

Composita a -clino, -rito, -stauro, -stimo, -fragor,
Fendo, -fligo, -gruo, -mineo, -nuo, -niveo, -stinguo;
Plura a *nomine*, ceu -*pedio*; -*buo* vel -*duo*, Græca;
Quæ cecidere usu, communis *regula* flectit.

A Themate interdum Compositi est litera dispar:
A -lacio, -lexi; elicio, elicui: a -leo, -levi;
A -specio, -spexi; a -cumbo, -cubui; a -pleo, -plevi:
-Cello, -*cellui* habet; solum percello, -*culi* dat.

2°. Perfecta.

Perfectum fugiunt meio, tollo, furo, vergo,
Ambigo, *neutrum* sisto; renideo, polleo, strideo;
Et ferio. *Inceptivum* in -*sco*; sic glisco, fatisco.
Et *Meditativum*; nisi parturio, esurioque.
Sic medeor, liquor, ringor, vescor, reminiscor:
Et Passiva, quibus caruere Activa Supinis.

3°. Perfecta Verbi Simplicis, non Compositi.

Cerno solet -*crevi*; quatio sibi gignere -*cussi*;
Tundo -*tudi*; vado -*vasi*; temno quoque -*tempsi*.
Sorbeo -*ui*; simul *ab*- (si vis componere) -*sorpsi*.

4°. Supina.

Sola creant, sint plura licet, Perfecta Supinum,
Livi, pegi, -punxi, -vulsi; haud altera forma.

Perfecto quot egent, tot egent & *Plura*, Supino;
Ango, clango, diſco, lambo, lingo, ningo,
Pſallo, volo, malo, nolo, metuo, luo, parco,
Poſco, rudo, ſcabo, ſapio, fugo, tremo, ſterto,
Geſtio, ſtrido, mico. *Compoſita*; ut dego, refello,
Reſpuo, & inceſſo, ſatago: Simul a *-gno* nata,
Vel *-nuo*; & a *-cado*, ſed recido, incido, & occido, *-caſum*.
Adde his compeſco, diſpeſco. Multaque porrò
Verba in *-eo*, ut *timeo*, *urgeo*: & *arceo*; quæque ſed hujus
Compoſita, *-ercitum* habent: Immò omnia denique *Neutra*
Flexa in *-ui*; ut *careo*. Sit enimverò tibi curæ,
Ne temerè admittas, propter *Verbale*, Supinum:
Nemo legit *caritum*, quamvis *carituru* in uſu eſt.

5°. Supinum, quod in ſolo Compoſito reperitur.
Cello ab *-ui*; *celſum*; ſed ab *-i*, vult mittere *-culſum*.

Anomala ſive Variantia

1°. Perfectum.

Quædam aliunde *novam*, perfecti expertia, *formam*
Accipiunt; ſoleo, audeo, mæreo, gaudeo, fido;
Sum ſolitus, mæſtus, gaviſus, fiſus, & auſus:
Paſſivum nec habent, nec, quo ſint orta, Supinum.

2° Perſonas vel Tempora.

Poſſum, malo, volo, nolo, queo, eo, fero, fio:
Cœpi, odi, memini, quæſo, inquam, aio, explicit, infit,
Salve & ave, faxo, auſim: Non hæc ſubdita fræno
Carminis, in *Canones* nec compeſcenda ligantes:
Sed *Typus* in proprias deſcribit ſingula *claſſes*.

PAR-

PARTICIPIUM.

Præsens emanat Thematis de fine secundo,
N sumpto; ut *dans*, a *das*: *-ens*, ab *-is*; *uris* ut *urus*:
-Is, quod *-io* generat, fit *-iens*. Hinc discе futurum
Passivum, (*s*) migrante in *-dus*; *iens* ut, *iendus*.
Cætera in *-us* formantur ab *Anteriore* Supino,
-M verso in *-s*, vel *-rus*; ut a *lect-um* fit *-us*, *-urus*.

Participium Deponens.

Congrua Passivis sunt Deponentia formis;
Amplector facit amplexus; moderor moderatus;
Polliceor bene format *-itus*; bene molior, *-îtus*.

HETEROSTOICHUM Participium.

Præsens & Perfectum.

Plus minus hæc variant, communi dissona formæ:
Ut labor lapsus, patior passus, gradiorque
Vult gressus; pariterque fatiscor reddere fessus.
Metior & mensus sibi postulat, utor & usus;
Vultque paciscor pactus, nanciscor dare nactus,
Obliviscor & oblitus, ulciscor & ultus.
Junge queror questus; proficiscor junge profectus.
A loquor adde locutus; & a sequor adde secutus;
A reor & ratus, expergiscor & experrectus,
Experiorque expertus, misereorque misertus,
Et comminiscor commentus, *apiscor* & aptus
Vox *vetus*; hinc Compostum *adipiscor*, adeptus *in usu*.
Nitor nixus, *-sus*; fruor & fructus, fruitusque.
Pro *texo* orditus, proque *incipio* ordior, orsus.
A tueor, tuitus; solet obtueor dare *-itum*.
A fateor fassus; composita per omnia, *-fessus*.
Mortuus & morior fertur dare, & anxius angor.

Futurum.

Ex orior, morior, pario, facit *-or* vel *-o*, *-turus*:
Deque luo, ruo, & arguo, nosco & nascor, *-iturus*.

Carmina, *decrepitæ* non convenientia *Musæ*,
Hæc rapiam: *juvenili* iterum polienda *Minervæ*.

THe Doctrin of *Letters* in reference to *Speech*, having been hitherto largely explained, through the various parts of Grammar; and a mention only made of their uſe in *Numbers* (p. 1.) It is not impertinent, towards a further knowledg of them, to annex unto this *Rudiment* the General precepts of Numbers: The knowledg whereof, as it is greatly neceſſary in the common courſe of life, ſo not a little in the reading of Authors. For although other *Characters* have wholely prevailed *Weſtward*, to ſupply the place of the *Native Letters* in the *unlearned Idiomes*; Yet not only all *Claſſic* Books, but the *Bible* alſo (for the underſtanding whereof all other are here taught) *Latin*, *Greek*, *Hebrew* with their *Dialects*, they do all expreſs the Numbers by the proper Alphabet of the Language: And likewiſe the nobleſt Doctrin of Numbers call'd *Algebra*, has always been, and is ſtill taught and exemplifyed by *Letters*.

Neither ſurely is it unworthy of conſideration, that at *Athens*, the *Oecumeni-*

cal

cal School of Literature, all the Grand Masters there judged *Arithmetick* to be the fundamental principle to all other Institutions: both for the easie and as it were natural evidence and satisfaction of it to the young Learner; and specially for the inuring and fixing his tender ingeny to plain and infallible *Truths*; and not suffering it to be prepossest and deluded with *uncertain*, if not *fabulous*, *notices*; or discouraged with *difficult* and *abstract notions*, and *words* of *Art*; which occur in the *lowest Principles*, even of Grammar, utterly *unintelligible* to the *Little ones*.

In imitation therefore of their judicious example; and in a desire not to suppress and omit the *Learned extent*, and *one principal use*, of Letters; it seems expedient at least to gratify Children with these little *Symboles*, for their divertisement at less serious hours; and to apply the *first* exercises of their *reasonings* to the brief and evident, and not unpleasing *operations* of Arithmetick.

Gram-

Grammatica Numeralis.

Sive

ARITHMETICE

LITERALIS vel FIGURALIS.

Literæ Numerales.

LITERA, ſeu *clavis* reſerans penetralia *Mentis*,
Seu variæ *interpres* formans idiomata *Linguæ*,
Infinita opifex, mundo magnalia præbet.
Nec modò *Grammaticæ* ſervit *Generalis* in uſum;
Sed *Numerorum* artem, *Algebræ* & myſteria pandit.
Signum etenim *numeri*, communi Gentis ab uſu
Olim *Litera Graia*, & *Hebræa*, per Alphabetum.
I. V. X. L. C. D. M. *majuſcula* Romæ
Omnes ſupplevit numeros: vel *juncta*; vel *una*.
Graiis inſeritur *notulâ* in triplici *ordine* triplex:
Seu, *bau*, Nona, decas *koppa*, centuria *ſanpi*.
Ut *digitis*, ſic *literalis*, prior ordo novenus
Se *monade* exſuperat; *decade*, octo, *hecatontade*, ſeptem.
Solæ ſunt Græcis, numerandi ſigna, *Minores*
Literulæ: paucæ, numerali a nomine *primæ*,
Majores; Monadas tot, quot *ſua Nomina*, Signant:
Litera ἰῶτα, *una*; & π, *quina*; & Δ, nota *dena* eſt;
Ρ, *centena*; & χ, *millena*; & Μ, *decies* χ.
Sequas π claudat, *monas* omnis fit nota *quina*.

Monadicum libros notat Alphabeton Homeri;
Litera nec notulâ, aut decade, aut hecatontade creſcit.

Index *Chiliadum* eſt, cum *virgis* litera: Græcus
Quas *infra* potiùs, *ſupra* ſed ponit Hebræus.
Quinetiam *finalis* Hebræis Litera, *recto*
Ordine, ſignificat *centenos quinque ſupremos*.

Litera

Litera *primævum* dat Græcis *Nomen* Hebræa; *Nominis* a quibus *initium* cepere Latini.
Ordo mutatur paucis; pauciſque *Poteſtas*.

Alphabetum Trilingue.

	Heb.	Græc.	Lat.	&c.		
Literæ :	א.	α.	a.	ב.	β.	b. &c.
Nomina:	aleph.	alpha.		beth.	beta.	&c.

Monades.

	1.	2.	3.	4.	5.	6.	7.	8.	9
Heb.	א.	ב.	ג.	ד.	ה.	ו.	ז.	ח.	ט
Græc.	α.	β.	γ.	δ.	ε.	ϛ.	ζ.	η.	θ
Lat.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX

Decades.

	10.	20.	30.	40.	50.	60.	70.	80.	90
H.	י.	כ.	ל.	מ.	נ.	ס.	ע.	פ.	צ
G.	ι.	κ.	λ.	μ.	ν.	ξ.	ο.	π.	ϟ
L.	X.	XX.	XXX.	XL.	L.	LX.	LXX.	LXXX.	XC

Hecatontades.

	100.	200.	300.	400.	500.	600.	700.	800.	900
H.	ק.	ר.	ש.	ת.	ך.	ם.	ן.	ף.	ץ
G.	ρ.	σ.	τ.	υ.	φ.	χ.	ψ.	ω.	ϡ
L.	C.	CC.	CCC.	CD.	D.	DC.	DCC.	DCCC.	CM

Chiliades.

	1000.	2000.	&c.	5000.	&c.	10000.	&c.
H.	א.	ב.	&c.	ה.	&c.	ו.	&c.
G.	α.	β.	&c.	ε.	&c.	ι.	&c.
L.	M.	MM.	&c.	IↃ.	&c.	CCIↃↃ.	&c.

אמסו αχξς MDCLXVI.

At M Literulæ latera [a]*incurvavit*, & ambo [a]ⲙ
In geminum quasi C diffregit scriba Latinus, [b]CIↃ
Cum [b]medio velut I. Quòd si clausum I venit inter
[d]Bis duo C, contrà, *decies* ita *mille* figurat. [d]CCIↃↃ
Inter *C* [f]*plura*, I decuplat *tot millia*: plura, [f]CCCIↃↃↃ
Quàm bis utrinq; duo C, vix probus obtulit Autor.
C fixum ad basin I [g]surgentis utrinque cohæret ⲙ̄

Fit M, cui binum latus, ova ut bina, rotundum. ⲟⲟ
M. ⲙ. CIↃ. ⲙ̄. [k]ⲟⲟ. 1000. [k]*Paterc.* l. 1.
CCIↃↃ. [m]ⲙ̄. 10000. [m]Vet. Inscript.
*CCCIↃↃↃ. ⲙ̄. 100000. **Cicero pro Rosc. Com.*
CCCCIↃↃↃↃ. ⲙ̄. 1000000.

Semi-q; -millia, decisum M, triplice formâ.
IↃ, D, ♄. 500. IↃↃ. ♄. 5000.
*IↃↃↃ 50000. IↃↃↃↃ 500000.
Roma duas solet aut plures replicare figuras.
Ut CIↃ·CIↃ 2000. CCIↃↃ.CCIↃↃ. 20000. &c.

Figuræ Numerales.

Indus adinvenit numerandi symbola dena.
Communi haud multum est variabilis Indica *forma*:
Partim *transposita* est, partimque figura *reclinis*;
puncta fere *decadas* signant, referentia ciphras.

1 2 3 4 5 6 7 8 9 0

Ordine

Ordine producit *digitos* monas aucta novenos.

1. 1 & 1 = 2. 2 & 1 = 3. &c.

Ciphra nihil signat; decadem præposita subinfert.

10. 100. 1000.

LOCUS Numeralis.

Ordo *Loci* triplex; *monas*, & *decas*, atque *hecatontas*, III *viz.* CXI.

Hæc tria *Periodos* infinitas Loca præbent.

PERIODUS Numeralis.

Prima notat Monadas, dat *Chiliadum* altera Nomen; *Millena* exin *millia*; dein Adverbia *millies*. Periodos *punge* a *dextro*; *lege* ab ordine *lævo*.

Lectio Numerorum.

MMM. MM. M. V.
123 123 123 123.

Centum viginti tria millies millena millia, centum viginti tria milliens millia, centum viginti tria millia, centum viginti tres unitates.

Numeri SPECIES & MEMBRA.

Et Numerus *Simplex*, Digitus si ponitur Unus.

Si Digitum Digitus claudit, *Compositus* habetur; *Articulus*, Digitum si Claudit Ciphra, vocatur.

Integer est etiam, vel *Fractus*. Porrò vel *Impar* integritas, vel *Par*: vel *Partes*, Fractio, vel *Pars*. *Euclid. lib. 7.*

[a]*Par* est; quem *duas* in Semisses findit; ut hectas. [a]*Def. 6.*

6 = 3 + 3

[b]*Impar*; quem *duas* haud æquè partitur; ut heptas. [b]*Def. 7.*

7 = 4 + 3.

[c]*Pars*; quæ mensurat numerum; ut *duas bessadas* triplat. [c]*D. 3*

2 + 2 + 2 = 6

[d]*Partes*; quæ non mensurant; ut ad *heptadas* tetras. [d]*Def. 4*

4 ad 7 i.e. quatuor unitates ad septem.

[e]*Perfectus*; sibi quem simul omnia membra coæquant

[f]Def. 22. vide pag. 212

COL-

Primum sola *monas* numerum metitur; ut heptas.
viz. 1) 7 (7. Eucl. l. 7. *Def.* 11.

COLLATIO Numerorum
Per Praxeôn formas quatuor.

Quadrinam ad formam Numeros *Operatio* confert. Sex *Notulæ* expediunt *praxin*, compendia vocum: *Crux*(+)Addit. *Chi*(×)Multiplicat. Sed *Linea*(-)Demit;
a+b a×b a−b
Dividit aut *subtus recta* ($\frac{:}{b}$), aut *interfita curva* b) a(. Linea bina(=)æquat. *Duo*(:), *bis* duo(::), *analoga* puncta.

1. ADDITIO.

Colligit in *Totum*[d] *Additio* numeralia *membra*.[c, c]

$$2^c + 3^c = 5^d$$

2. SUBTRACTIO.

Membrum[c] aufert *Toti*[d], & *reliquum*[c] *Subtractio* ponit.

$$5^d - 2^c = 3^c$$

Tabula Additionis & Subtractionis.

0	1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9	10
	2	4	5	6	7	8	9	10	11
		3	6	7	8	9	10	11	12
			4	8	9	10	11	12	13
				5	10	11	12	13	14
					6	12	13	14	15
						7	14	15	16
							8	16	17
								9	18

Usus Tabulæ.

Adde notam *Lævam* ad *Superas*; dat *cellula* summam.
Dem notam *supèram* cellæ, extima *læva* relicta est.
1 + 1 = 2. 2 + 2 = 4. 2 - 1 = 1. 4 - 2 = 2.

Ex his *Simplicibus* gemina est forma altera *Complex*

1. MULTIPLICATIO Sive Multiplex Additio

Factores[a.a.] in *Factum*[b] *Multiplicatio* plectit.

$2^a \times 3^a = 6^b$: sive 2 ter positum; 2+2+2=6.

2. DIVISIO Sive Multiplex Subtractio.

Divisor[a], *Quota*[a] particula est, *Divisio* monstrat, *Dividui*[b]: aut quoties numero uno evolvitur alter

$\frac{6^b}{2^a} = 3^a$; sive 2)6^b (3^a: vel 2 ter sublatum de

Tabula Multiplicationis & Divisionis.

1	2	3	4	5	6	7	8	9	0
1	2	3	4	5	6	7	8	9	1
	4	6	8	10	12	14	16	18	2
		9	12	15	18	21	24	27	3
			16	20	24	28	32	36	4
				25	30	35	40	45	5
					36	42	48	54	6
						49	56	63	7
							64	72	8
								81	9

Usus Tabulæ.

Dextrum duc latus in *summum*, *lævum* inspice factum: In *summo* quotus est; *dextro* partire *sinistrum*.

1×1=1. 2×2=4. 1) 1 (1. 2) 4 (2.

Qui

Quinetiam *digitos* binos plicat *altera* praxis:
Deme datos *decadi*, juxtaque appone *relictos*:
Hos ſic appoſitos ſubter ſe pone *plicatos*; 8 2
Alternumque relictum utrivis deme *datorum*. 7 3
Quæritur quot ſint 7×8: Reſpond. 5 6

Hoc quoq; rite *Manus* præſtant opus, abſq; Tabellâ.
Exere tot digitos, decadi quota deſit, utroq;
Ex numero, monas; his exertis, claude relictos:
Clauſi ſunt *decadum*, *digitorum* ſymbola *tenſi*;
Multiplica tenſos, & clauſos adjice facto.

Diſpoſitio *Figurarum* in praxi.

Prima ſubit primam, reliquas reliquæ indè figuras,
Dextrâ a parte: opus a *lævâ* Diviſio cæptat.
Scribe infrà, digitum; monadem, *decadis* vice, *transfer*.
Sæpe *capit* decadem, & monadem Subtractio *reddit*;
Infrà nempe *data* eſt; *ſupra* aut *ſublata*, ſecutis.
Facta ita *prima* omnis nota ſub *factrice* locetur;
Factrix ut *ſociam*, in *factam*, diſtincta plicaret;
Summaque congrueret poſitis bene ſtructa figuris.
Intexunt numerum *factores* ut duo *factum*;
Dividuum quotus & *diviſor* ita ambo retexunt.
Quære *quotum*; duc in *diviſorem*; exime *factum*:
Dextrorſum motus diviſor ſede ſit unâ:
Pone *quotum* dextrâ in ſellâ; deno uſq; minorem; &,
Dividuo *Diviſor* ubi eſt major nota, *ciphram*.
Reſiduum praxis ſupra, vel collocat infra
Dividuum. *Examen* Toti ſua membra coæquat.

Typus quatuor Operationum.

1°. Triliteralis.

Hebræis numerus major ſtat ab ordine dextro.

Add.	Subt.	Add.	Subt.	Add.	Subt.
לב	נה	λβ	νε	XXXII	LV
כג	כג	κγ	κγ	XXIII	XXIII
נה	לב	νε	λβ	LV	XXXII

Mult.	Div.	Mult.	Div.
לב	קמ	λβ	ϱμ
כג	(כג) ן לו (לב)	κγ	(κγ) ψλϛ (λβ
צו	סצ	ϟϛ	χϟ
סמ	מו	χμ	μϛ
קלו	ן לו	ψλϛ	ψλϛ

Mult.	Div.
XXXII	X
XXIII	XXIII) DCCXXXVI (XXXII
XCVI	DCXC
DCXL	XXXXVI
DCCXXXVI	DCCXXXVI

Fig

2. FIGURALIS.

Additio. Subtractio.

$764 + 543 = 1307.$ | $1307 - 764 = 543.$

Multa ubi vexat opus numerorum turba, licebit Commatibus mediis generalem absolvere praxin.

Add. 343
421..764
232
311..543
1307

Subtr. 1307
220
123..343
311
110..421
764
543

Multipl.
764
543
2292
3056
3820
414852

Divisio.
Per *multas* variat praxin Divisio *formas.*

2292
3285
764) 414852 ($5^a 4^b 3^c$)
764^a 3820^a
764^b 3056^b
764^c 2292^c

2292
3285
764)414852(543
3820
3056
2292
414852

764) 414852 (543
* Abl. 3820
Res. 3285
* Abl. 3056
Res. 2292
* Abl. 2292
0000
*** Abl. 414852

Ista sed Methodus minimè *Ablatitia* scribit, Per *Dandam*, digitum tollit, decadesque reservat.

Quin a *reſiduis* pone *Ablatitia*, dextrâ;
Hinc ut *Dividua*, illinc *Diviſiva* locentur.

Dd. 414852	Dr. 764	Qu. 543
328.5	3820	
229.2	3056	
0000	2292	

Dividuum ſi non adimit Diviſio totum;
Pone ſuper Diviſorem quodcunque ſuperſit.

(24
764) 414876 (543· $\frac{24}{764}$ vide numeros fractos, p. 217

Compendia Multiplicationis

1°. Si *dextro* numerorum occurrant ordine *Ciphræ*;
Primùm *ſepoſitas*, praxi præpone *peractæ*.
Exempl. 320, 230. $32 \times 23 = 736\ 00$.

2°. Per 10. 100. 1000. &c.
Si *Monas* eſt factrix cum *ciphris*, fit cita praxis:
Ciphra etenim numeris decadem *infert* dextra plicandis;
Dividuam dextra *aufert* dextram ciphrâ figuram.
Mult. $10 \times 12 = 120$. $100 \times 13 = 1200$
Div. 10)1230(123. 10)123 (12. 100)123 (1.

3°. Per 5.
Ciphram ad ſemiſſem numeri præpone, peractumeſt
Exempl. 346 per 5. 1730.
Si nequit in binas diffindi dextra figura;
Rite, loco ciphræ, praxim expedit addita pentas.
Exempl. 347 per 5. 1735.

4°. Per. 11. 12. 13. 14. 15. 16. 17. 18. 19.
Cum *decadem* excedat numerus, minor *icade*; ſolus
Præſtat opus digitus, numero ſi cuique plicato
Addatur digitus, quiſquis fuit antè plicatus.
Exempl. 347 per 11. 3817. 347 per 15. 5205.

Plus

5°. Plura simul plures numeros compendia texunt: *viz.* per 102. 103. 104. *&c.*

Multiplica digito numerum; binâque retractas Sede notas, numero quem feceris, adde plicandas.

Exempl. 347 per 102. $347 \times 2 = 694$.
347.
35394.

Aliaque istiusmodi.

§ RETROGRADA Praxis.

Inversâ numeros methodo tractare licebit. *Additio Decadas*, vel *Multiplicatio*, factas Ad lævam; sic tollendas, *Subtractio* ponit.

Ludicra, sed neq; tam facilis neq; tam cita, *Praxis*.

Add. 76	Subtr. 130	Multipl. 76
54	Abl. 76	54
12	Ref. 6	35
10	Abl. 1	30
139	Ref. 54	28
		24
		4104

EXAMEN Praxeon.

*** Vide pag. 205.

*Addita Subtractam; *Divisam Multipla formam Comprobat; *& contrà. Nec iniquū Examen habetur *Enneas*, hinc illinc numeris ejecta; vel *Heptas*. *Enneas*, absque locis, *digitos*; *loca* respicit *Heptas*.

Examen per 9.

Add. per 9.	764 543:2. 1307:2.	Mult. per 9.	764:8. 543:3. 414852:	$8 \times 3 = 24:6$ 6

Restat

Restat idem, si de *digito* numerive *valore*
Dempta sit *Enneas*; ut de *ternis*, deque *trecenis*.

3.
9) 300.

Dividuos, & Residuos parit æqua, Quotosque,
Enneas, è Decadum articulis: summa alligat omnes.

888888 77777
8765430. 9) 8000000 (888888. 9) 700000 (77777
6666 555 44 3
9) 60000 (6666. 9) 5000 (555. 9) 400 (44. 9) 30 (3

Examen per 7.

Add. per 7. $\begin{cases} 764:1 \\ 543:4 \\ \hline 1307: \ldots . 5 \end{cases}$ $1+4=5$ Mult. per 7. $\begin{cases} 764:1 \\ 543:4 \\ \hline 414852: \ldots 4 \end{cases}$ $1\times4=4$

In numeris eadem ratio est quos subtrahis, & quos Addis; utrinq; pares numeros probat Enneas; Heptas.
Sic quos Multiplicas ratio, & quos dividis, una est.

Præbet Multiplicis Simplex Examina formæ

Examen Multiplicationis per Additionem.

$3z = a$ $b = 3^2$
23 $c = 2o^2$
$96 = b$ ergo $b + c = 2o^2 + 3z = d$.
$64 = c$
$736 = d$

$23 = a) 736 = d (32$
$690 = b$
$46 = c$

Examen Divisionis

Per Addit. $b + c = d$ $3o^2 + 2z = b + c$ *Ergo* $3o^2 + 2^2 = d$.

Per Subtr. $b + c = 3o^2 + 2^2$ $d - b - c = o$. *Exgo* $d - 3o^2 - 2^2 = o$

Exa-

¶ At facilè est Praxin numeris eludere fictis.

```
      764 }
9)        }——2
      543 }
      ———
     1037 ——— 2
```

¶ Operatio formæ Multiplicis per Simplicem.

Præstat & Additio, quam Multiplicatio praxin;
Et Subtractio, quam Divisio; si nota quæque
Addita sit sibimet numeri *unius*, in se
Quot monadas capit *alterius* nota *maxima*: Summæ
Aptè dispositæ facilem rediguntur in usum.

1ª Multipla.		Multiplicatio
764	1	764
1528	2	543
2292	3	2292
3056	4	3056
3820	5	3820

2da. Multipla		
543	1	543
1086	2	764
1629	3	
2172	4	2172
2715	5	
3258	6	3258
3801	7	3801
		414852

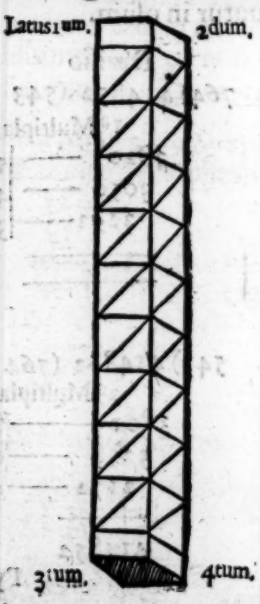
Divisio

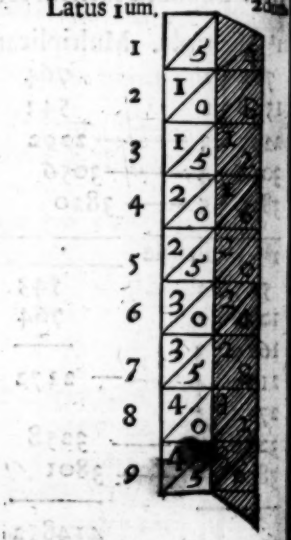
```
764) 414852 (543
        1ª Multipla.
     3820 ——— | 5
      3056 ——— | 4
       2292 ——— | 3
```

```
543) 414852 (764
        2ª Multipla.
     3801 ——— | 7
      3258 ——— | 6
       2172 ——— | 4
      ———
      414852
```

Py-

Pythagoræ, similem, aut *Neperi Lamina*, praxin
Expedit; in numeros scitè tractabilis omnes.
Propositum quot habet distinctas *Lamma* figuras;
Tot *virgas*, paribus *digitis*, à fronte notatas
Sume; plicat digitos in cellis *ordo novenus*:
Linea per quadras *Diagonia* ducta plicatos
Divellit, *digitum* à dextrâ *decademque* finistrâ:
Hos praxis jubet *unire*; atque exscribere *summas*.
Cœlatur triplici *numeralis machina* formâ:
Lamina cuique plicat digitos sua qnæque novenos.
Neperi latere in *quadrino* Lamina sculpta est:
Altera sed *bino*, enneadem referente bisectam:
Fert digitos etiam undena omnes Lamina *simplex*.





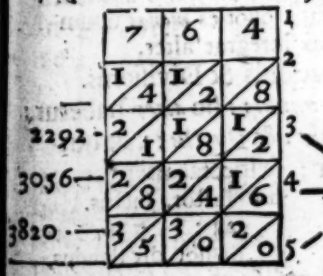
1	1	2	3	4	5	6	7	8	9	0
2	2	4	6	8	10	12	14	16	18	0
3	3	6	9	12	15	18	21	24	27	0
4	4	8	12	16	20	24	28	32	36	0
5	5	10	15	20	25	30	35	40	45	0
6	6	12	18	24	30	36	42	48	54	0
7	7	14	21	28	35	42	49	56	63	0
8	8	16	24	32	40	48	56	64	72	0
9	9	18	27	36	45	54	63	72	81	0

Multiplicatio.

Examp. 764
543

1 Factor 764

Factor 543



Diviſio.

Div. Quot.
764) 414852 (543

3820
3056
2292

414852

AXIO-

AXIOMATA.

Ad praxes faciunt *Apophthegmata* fida probandas: Et, quæ dant numeris, bene nota *Porisma*, lucem.

Axioma 1um. Euclid. l. 1. axiom. 1.

Ergo aliud quæ conveniunt, his convenit *in se*.

1 + 4 = 5: & 2 + 3 = 5: ergo 1 + 4 = 2 + 3.

Axioma 2um. Eucl. l. 1. axiom. 1. 2. 3. 4. &c.

Imparibus, paribusve pares si dempseris, aut si Addideris; quales fuerant, utrosque relinques.

$6\begin{cases}-2=4\\+2=8.\end{cases}$ $5\begin{cases}-2=3\\+2=7.\end{cases}$

Contrà fit praxis numero sed ab *impare*; nempe Impar, par numerus; par, fit contrarius impar.

5 + 3 = 8: 5 − 3 = 2. 4 + 3 = 7: 4 − 3 = 1.

Axioma 3^ium. Eulc. l. 1. axiom. 9.

Partes Totum æquant; minor est pars singula Toto.

2 + 3 *partes* = 5 *totum*. 2 vel 3 *pars* minor quàm 5 *totum*.

Elenchus Additionis & Subtractionis.

Ut Partes : Toti :: sic Totum : Partibus æquum.

partes. totum. totum. partes.

Add. 32 + 23 = 55. Subtr. 55 = 32 + 23.

Axioma 4^tum. Euclid. lib. 7. Def. 15. & Consectaria.

Si numerus numerum intexat; quoties *manas* unum *Factorem*, toties *factor factum* integrat alter.

Elenchus Multiplicationis & Divisionis.

Ut *Monas* : *ad factorem unum* : : sic *alter* habetur: *Ad Factum*. Pariter; *Monas* : & *Quotus* : : & qui *Dividit* : & qui Dividitur; se spectat uterque.

unitas. 1us factor, 2^dus factor. factus.

1 : 32 :: 23 : 736.

unitas. quotus. divisor. dividendus.

Compositum redit in sua Compositiva; nec *auget* Multiplicans, *totum*; *minuit* nec *membra*, resolvens.

Porisma

Porisma 1um. Eucl.lib.2 Prop.1.2.3.

Integer in Totum, vel singula Membra plicatus,
Efficit æquales numeros. Par calculus exit,
Si *Membrum* plicet Integrum, vel singula Membra.

$9 = 2 + 3 + 4.$ $9 = 2 + 3 + 4.$ $9 = 2 + 3 + 4.$
8 9 2

$72 = 16 + 24 + 32.$ $81 = 18 + 27 + 36.$ $18 = 4 + 6 + 8.$

Porisma 2dum. Eucl.lib.7. pr.17.

Si numerus *plures* quotcunque plicaverit *unus*; *memb.* 1.
Talis erit *genitis*, qualis fuit ordo *plicatis*.
Haud aliter, si quis *plures* diviserit *unus*. *memb.* 2.

$$\left.\begin{matrix}2\\2\times3\\4\end{matrix}\right\}=\begin{matrix}4\\6\\8\end{matrix} \qquad 2)\begin{matrix}4\\6\\8\end{matrix}\ \begin{matrix}2\\(3\\4\end{matrix}$$

$2:3:4::4:6:8.$ & vice versâ.

Porisma 3lum.

Si *tria* disponas, ut *primum bina* plicata
Dividat; indubiè *quartum*, quod congruit, exit.

$1:2::5:10$ $1)2\times5(10$

Porisma 4um. Eucl. l. 7. pr. 19. 20.

Æquus ab *extremis* numerus *mediisque* plicatur.

$1:2::5:10.$ *ergo* $1\times10=2\times5.$

Porisma 5um. Eucl.lib 2. prop.4.

Diviso in binos numero; *quod* procreat in se
Integer; *id* Pars in se singula, bisque
Utraque in alterutram: hinc numerus par factus & illinc.

Integ. Partes. $16\times16=\!=\!=\!=\!=256$

$16=12+4$

$$\left.\begin{matrix}12\times12=144\\4\times4=16\\12\times4=48\\4\times12=48\end{matrix}\right\}=256$$

Porisma 6um. Eucl. lib. 2 prop. 7.

Integer intrusus sibi, Pars in seque plicata,
Ambo simul parient; *quod*, & integer actus eandem
In partem, bis; & altera pars in se acta, creabunt.

Integ. Partes.

$$16=12+4.\ \left.\begin{matrix}16\times16=256\\12\times12=144\end{matrix}\right\}=400 \left\{\begin{matrix}16\times12=192\\16\times12=192\\4\times4=16\end{matrix}\right\}=400$$

Porisma 7um.

Dato numero, reddere tres quorum unus par cæteris duobus.

1o. Dato Impare.

Primus erit numerus, quadratus ab impare; & *alter*, Post monadem abjectam, ex semisse; & *tertius*, inde Post monadem adjectam: Reliquis par iste duobus.

Impar. 7. Q 49 — 1 = 48; Semis 24. Q 576.

24 + 1. Q 625 = Q 49 + Q 576.

2o. Dato Pare.

Quadratus minor e numero pare provenit *unus*:

Quadrato semisse paris, deme, adjice & unum;

Uno *auctus*, *reliquos* quadratos continet *ambos*.

Par. 6. Q 36. Semiss. 3. Q 9. 9 — 1 = 8. Q 64.

9 + 1 = 10. Q 100 = Q 36 + Q 64.

Porisma 8um.

Datâ Monade vel Tetrade dicere numerum *Perfectum*

1o. Datâ Monade. Eucl. lib 9. Prop. 36.

A monade ad Primum e duplis præeuntibus ortum

Progredere; hunc duc induplum qui proximus anteit

Monas 1 + 2 = 3 Primus. 3 × 2 = 6 Perfectus.

1 + 2 + 4. = 7 Primus. 7 × 4 = 28 Perfectus.

1 + 2 + 4 + 8 + 16 = 31 Primus. 31 × 16 = 496 Perf.

2o. Datâ Tetrade.

Si numeros rectè involvens a Tetrade duplos,

Majori e binis monadem, quoquo ordine, demas;

In reliquum minor implicitus, Perfectus habetur.

Dupl.	4. 8.	16. 32.	64. 128	256. 512
	4×8−1.	16×32−1.	64×128−1.	256×512−1
Perf.	28.	496.	8128	130816.

Geneſis

Geneſis & Analyſis Numeri Perfecti.

A monade ad *Primum* dupli omnes; indeque dupli
Progeniti a *Primo*, velut ad *Primum* antè creati:
Quot præeunt *Primum*, tot *Primus* deinde reponit.
Ut *duas* intexit; ſic omnia membra retexit:
Quin medio manet *indiviſus* in ordine *Primus*.

Geneſis, Multiplicando per 2.

1: 2: 4: =7*: 14: 28. *Primus **

1:2: 4: 8:16: =31*: 62: 124: 248: 496.

1:2:4:8:16:32:64=127*254:508:1016:2032:4064:8128

Analyſis, dividendo per 2.

28 : 14 : 7*: 4: 2: 1.

496: 248: 124: 62: 31*: 16: 8: 4: 2: 1.

8128:4064:2032:1016:508:254:127*: 64:32:16:8:4:2:1

Poriſma 9um.

Datorum *Numeralium* dicere tranſpoſitiones per multiplicationem.

Tot vicibus data tranſponi numeralia poſſunt, ☞
Quot creat ex numero numerus* *datus* ante-creato.
Quot *datus* aut numerus capit, a monade uſq; plicato.

Datur Numerus *6. ante-creatus ** 120:
Poſtulantur variationes numeri 6.

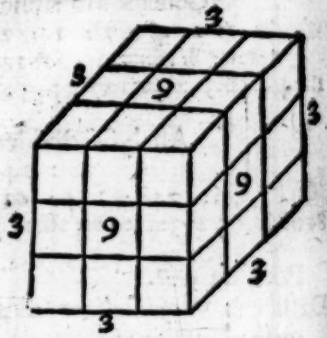
Vel 1×2×3×4×5×6=720

Nuncupatio numerorum Geometrica.

Nomina dat numeris Geometria: Planus, habetur
Quadratus: Solidus, Cubus; vel Cubo-quadratus.
Se Quadrat implicitus numerus *ſibi*; biſque plicatus,
Cubicat: In *diverſum* actus, Rectangulus exit.

$2 \times 2 = 4$. Q. $2 \times 2 \times 2 = 8$. C. $2 \times 3 = 6$. R.

Simplicibus quotquot Monades coiere plicatis;
Tot ſunt quadratæ in conſecto Schemate cellæ.



Porro triangula vel multangula forma notatur,
Per monades ſubtus digitorum ex ordine, ſcriptas.
Una monas latus omne æquum parit, inſita centro:
Infimus & monadum numerus latera omnia adæquat.

Centricus in ſe ductus eundem in fine reponit:
Sic ſe multiplicat *monas*; & ſe *pentas*; & *hectas*:
Productas latus è medio replicatur in omnes.

Numeri fracti sive Minutiæ.

Exprimitur numeris, summo imo, Fractio binis:
Integros *media* in fractum unum *virgula* mutat. 2,5 fiunt $\frac{2}{5}$
Supra est, quæ *numerat*, nota; quæ *denominat*, infra est.

Fractionis { Numerator. $\frac{1}{2}$. $\frac{1}{3}$. $\frac{1}{4}$.
Nominator.

Fractio ita ad monadem, supera ut nota spectat ad imam,
Exempl. $\frac{1}{2}$. $\frac{1}{2}:1::1:2$. vel $\frac{1}{2}$ est semissis unitatis.
Utraque si par sit, *monadem* divisio præbet.

$$\frac{1}{2}. \quad \frac{22}{22} \text{ vel } \frac{100}{100} = 1.$$

Fractionum Species.

1. Fractio Analoga.
Analoga est *minor* ad *majorem*, fractio compar;
Utraque, quæ *numerat*, nota, cum *pars* nominis *æqua* est,

$$\frac{2}{4} = \frac{3}{6} \text{ \&c.}$$

Integrum par fit, par fractio bina, *chiasmo*;
Si ducta in *superam lævam* nota *dextra* sit *ima*.

$$\frac{2}{4} \cdot \frac{3}{6} : \overset{12}{\frac{2}{4}} \times \overset{12}{\frac{3}{6}}$$

2. Heteronyma.
Fractio subtus habet diversum *Heteronyma* nomen,

$$\frac{1}{2} \quad \frac{3}{5}$$

3. Impropria.
Impropria est pars ima, minor; pars utraque compar;

$$\overset{*}{\frac{2}{1^*}} \qquad \overset{**}{\frac{2^*}{2^*}}.$$

4. Mixta.
Si numero integro coalescat fractio, *mixta* est.

$$1\frac{1}{2} \qquad 2\frac{3}{4}$$

5. Minutiæ minutiarum.
In partes subdividitur pars fracta refractas.

$\frac{1}{2}$ de $\frac{2}{3}$ de $\frac{3}{4}$.

Reducere Fractiones

Minutias minutiarum in unam.
Inferna infernis intrude, superna supernis.

$\frac{1}{2}$ de $\frac{2}{3}$ de $\frac{3}{4}$ Solid. $= \frac{6}{24}$ sive $\frac{1}{4}$. i.e. 3 denarii.

Heteronymas ad homonymiam.
Nomen in alternum, signum numerale, *chiasmo*
Complica utrinque; plica *rectè* duo nomina in unum.

$\frac{3}{4} \cdot \frac{2}{3}$ $\frac{9}{12} \times \frac{8}{12}$ nam 3:4::9:12. & 2:3::8:12.

Minutias, ad infimas.
Fac ope *mensuræ*, sit trusa minutia ad *imam.
Mensura est, plenè numeros quæ dividit ambos:
Majorem numero partire minore, reperta est.

$\frac{48.}{768}$ 48) 768 (16. 48 mensura est. 48) $\frac{48}{768}$ ($\frac{*1}{16}$

Si monas in praxi supereſt, mensura negatur.

$\frac{49}{768}$ Termini infimi: Nam facta †divisione, supereſt unitas.
Triplex modus †divisionis.

$\frac{1}{33}$ (2 $\frac{768}{49}$ (15 1 16 33
$\frac{16}{49}$ (1 vel $\frac{33}{16}$ (2 vel 16) 33) 49) 768 (15 (1
$\frac{33}{16}$ $\frac{16}{1}$
768 (15
49

Hæc duo fractorum praxin *præcepta* gubernant: Nempe ut *nomen idem* fractis sit, & *infimus ordo*. Ambo demonstrat vera esse *Porisma secundum*. p. 213

Elenchus reductionis ad homonymiam.

$\frac{1}{2}\overset{3}{\times}\frac{2}{3}$ Id est $\frac{1}{2}=\frac{3}{6}$ $\frac{2}{3}=\frac{4}{6}$ Nam $3\times\frac{1}{2}=\frac{3}{6}$ $2\times\frac{2}{3}=\frac{4}{6}$ Vid. *Per.* 2. *m.* 1.

Elenchus reductionis ad infimas minutias.

$\frac{3}{6}\overset{b}{)}3=\frac{1}{2}\overset{c}{)}$ Mensura[a]. Divid[b]. Quotus[c]. *Per.* 2. *m.* 2.

Reducere impropriam ad mixtam; vel ad unitatem. Membrum quod *supra* est, membro partire quod *infra* est.

$\frac{3}{2}=1\frac{1}{2}$ $\frac{2}{2}=1$

Mixtam ad Impropriam.

Implicito integris membro quod *nominat*, adde, Quod *numerat*, membrum; ut sit fractio idonea praxi.

$12\frac{2}{3}$ $12\times3=\frac{36}{3}+2=\frac{38}{3}$

§ Scire utra è binis fractio sit major.

Cujus in alternum *numeralis* portio *nomen* Ducta, parit numerum majorem; ea fractio major.

$\frac{3}{4}$ & $\frac{5}{7}$ $3\times7=21$ $5\times4=20$ Itaque $\frac{3}{4}$ fractio major.

Hinc quæ *dividit*, & *divisa* est, fractio scitur.

v. g. $\frac{5}{7}$ dividens; $\frac{3}{4}$ dividenda.

Operandi Formulæ.

Quadruplicem peragit proba Multiplicatio Praxin:
Additio & Subtractio.

Adde notas *heteronymiæ*; vel Subtrahe; postquam
Feceris *univocas*, Fugiunt *heteronyma* praxin.
Per numeratores sed praxin *homonyma* complent.

		Add.	Subt.
	$9 \pm 8 =$	17	1
Heteron.	$\frac{3}{4} \frac{2}{3}$		
	12	12	12
Homon.	$\frac{4}{5} \pm \frac{3}{5} =$	$\frac{7}{5}$	$\frac{1}{5}$

Additio fractionum plurium.

Fragmina plura modò veniant addenda; priorem *Summam*, ceu fragmen simplex, usque adde secutis.

$$\frac{1}{2} + \frac{2}{3} + \frac{3}{4} \quad \frac{3+4}{6} \quad \frac{1}{2} + \frac{2}{3} = \frac{7}{6} \quad \frac{28+18}{24} \quad \frac{7}{6} + \frac{3}{4} = \frac{46}{24}$$

Alia Praxis.

Singula, quæ *numerant*, age in omnia *nomina*; præter Propria: Duc etiam, ut prius, omnia nomina in unum.

$\frac{1}{2} \frac{2}{3} \frac{3}{4}$ viz. $1 \times 3 \times 4 = 12$. $12 + 16 + 18 = 46$
$2 \times 2 \times 4 = 16$.
$3 \times 3 \times 2 = 18$.
$2 \times 3 \times 4 = \ldots\ldots\ldots = 24$.

Multiplicatio.

Rectè Multiplica: $\frac{2}{3} \times \frac{3}{4} = \frac{6}{12}$ Viz. $\frac{1}{2}$.

Divisio.

transversim Divide Fractos: $\frac{2}{3} \times) \frac{3}{4} (\frac{9}{8}$ Viz. $1\frac{1}{8}$.

Qui

Qui sic multiplicat, minuit; qui dividit, auget:
Infra etenim monadem, se *multiplicata* retrudit
Fractio; se *divisa* supra locat: utraque praxis,
Contrà quàm integros numeros, tollitque premitque.

Compendia Praxeôn in Minutiis.

Generalis Regula.

Obliquè, breviat numeros Mensura, *plicandos*;
Rectè, *Dividuos*: Addendis, Subque-trahendis
Nomina item *rectè* breviat mensura; *Quotosque*
Substituit vice, quæ sunt breviata, priorum:
Inque quotos intrusa, notam dat *Nominis* unam:
Obliquè ambo *quoti* renovant Numeralia signa.

Multiplicatio.

$$\begin{array}{l} 1^a \times 1^b = 1 \\ 3^a)\ \frac{3^a}{10^b} \times \frac{5^b}{6^a} \\ 5^b)\ 2^b \times 2^a = 4 \end{array} \quad \begin{array}{c} 15 \\ - \\ 60 \end{array} \quad : \text{vel} \quad \begin{array}{c} 15 \\ - \\ 60 \end{array}$$

Divisio.

$$\begin{array}{l} 1^a \times 3^a = 3^a \\ 3^a)\ 3^a \times 9^a \\ 4^b)\ 4^b \quad 20^b \\ 1^b \times 5^b = 5^b \end{array} \quad \begin{array}{c} 36 \\ - \\ 60 \end{array} \quad : \text{vel} \quad \begin{array}{c} 36 \\ - \\ 60 \end{array}$$

$$\begin{array}{lcccc} & & & \text{Additio} & \text{Subtractio} \\ & 10 \pm 3 & = & 13 & 7 \\ \text{Mensura } 2. < & 2)\ \frac{5}{6} \times \frac{1}{4} & & - & - \\ & 2 \times 3 \times 2 & = & 12 & 12 \end{array}$$

Compendiosior, 1°. *Reductio heteronymarum, quando nominator unus aut alter socium componit.*

Nomina, *simplicibus demptis, duc cætera in unum:
Singula tunc partire illud per nomina *nomen*;
Propria quemque deinde *quotum* in *numeralia* trude.

$$\frac{1}{2} \cdot \frac{3}{4} \cdot \frac{2}{5} \cdot \frac{5}{12} \cdot \frac{\overset{30}{\overline{*\frac{1}{2}}} + \overset{45}{\overline{*\frac{3}{4}}} + \overset{24}{\overline{\frac{2}{5}}} + \overset{25}{\overline{\frac{5}{12}}}}{60} = \frac{124}{60} \text{ vel } \frac{992}{480}$$

Nam; 60 : 124 : : 480 : 992. Similiter partes; $\frac{30}{60} = \frac{240}{480}$

2°. *Diviſio, quando vel nominator vel numerator idem eſt.*
Si nota fractorum, quæ *nominat*, utraque par ſit;
Dividuum numerale ſuo partire ſodali.

$\frac{6}{7}$ per $\frac{3}{7}$. $\frac{3}{7}$) $\frac{6}{7}$ (2. vel $\frac{42}{21}$.

Sin nota par *ſupera* eſt, nota perficit *infera* praxin;
Dividuum Diviſivo ſub nomine nomen.

$\frac{3}{4}$ per $\frac{3}{5}$. $\frac{3}{5}$) $\frac{3}{4}$ ($\frac{5}{4}$. vel $\frac{15}{12}$.

Examen Praxeon in fractis.

Addita Subtractæ, Diviſæ Multipla praxis,
Sicut in *integris*, examen mutua præbet.

Add. $\frac{3}{4}+\frac{2}{3}=\frac{17}{12}$. Exam. per Sub. $\frac{17}{12}-\frac{3}{4}=\frac{2}{3}$ vel $\frac{32}{48}$.

Mult. $\frac{3}{4}\times\frac{2}{3}=\frac{1}{2}$. Exam. per Div. $\frac{3}{4}$) $\frac{1}{2}$ ($\frac{2}{3}$.

Praxis per Integrum & Fractionem.

Si praxis numerum *integrum* cum *fragmine* confert;
Pone ſub integro *monadem*, quâ fractio fiat.

3 & $\frac{2}{3}$ viz. $\frac{3}{1}+\frac{2}{3}$. Add. $=\frac{11}{3}$. Sub $=\frac{7}{3}$. Mult. $=2$. Div. $=\frac{9}{2}$.

Specialis Regula Multiplicandi vel dividendi fractionem.

Multiplicat fractum integro, *numerale plicando*;
Vel *ſubducendo*, *quod nominat*. At vice versâ
Dividit integro fractum, *numerale* ſupernè
Partitus; vel *multiplicans*, quod *nominat* infra.

Mult. $\frac{3}{4}$ per 2. $2\times\frac{3}{4}=\frac{6}{4}$ vel $2)\frac{3}{4}=\frac{3}{2}$.

Div. $\frac{4}{5}$ per 2. $2<\times\frac{1}{5}$) $\frac{4}{5}$ ($\frac{2}{5}=\frac{4}{10}$.

Praxis

Praxis per Fractiones Mixtas.

Si numerum integrum comitetur fractio, mixtam
Transfer in impropriam: *princeps dat regula praxin. *ap. 219

$3\frac{2}{3}$ & $2\frac{1}{2}$ i.e. $\frac{11}{3}$ & $\frac{5}{2}$. Summa $\frac{37}{6}$ vel $6\frac{1}{6}$.

Reſid. $\frac{7}{6}$ vel $1\frac{1}{6}$. Factus $\frac{55}{6}$ vel $9\frac{1}{6}$. Quotus $\frac{22}{15}$ vel $1\frac{1}{75}$.

Praxis per Integrum & Fractionem mixtam.

Integer integrum *mixta*, fractumque plicabit;
Dividet & pariter: reliquum cum fragmine miſce.

Mult. $2\frac{2}{3}$ per 3. $3\times2=6$. & $3\times\frac{2}{3}=\frac{6}{3}$ vel 2. Facti 6 & 2 = 8.

Div. $4\frac{2}{3}$ per 3. $3)\overset{(1}{4}(1.\ 1+\frac{2}{3}=\frac{5}{3}.\ \frac{3}{1})\frac{5}{3})\frac{5}{9}$ Quoti 1 & $\frac{5}{9}$.

Communi praxi: Mult. $2\frac{2}{3}$ i.e. $\frac{8}{3}$. $\frac{3}{1}\times\frac{8}{3}=\frac{24}{3}$ vel 8.
per 3

Div. $4\frac{2}{3}$ i.e. $\frac{14}{3}$. $\frac{3}{1}$) $\frac{14}{3}$ ($\frac{14}{9}$ i.e. $1\frac{5}{9}$.

A dato integro cum fractione *minori*, demere fractionem *majorem*.

Duc *monadem* integri in membrum quod *nominat*; adde Id, membrum ad *numerale*; *minor* fit fractio *major*.

Hinc fit, ſepoſito integro, per fragmina praxis.

$3\frac{1}{3}-\frac{2}{3}$ i.e. $2\frac{4}{3}-\frac{2}{3}$ Reſid. $2\frac{2}{3}$.

Adde quod, integro majus si fragmen adhæret; *Mixta* per *integros* erit & per *fragmina praxis.*

$3\frac{7}{8}\cdot 2\frac{5}{9}\cdot 3-2=1.\quad \frac{7}{8}-\frac{5}{9}=\frac{23}{72}.$ Residui 1 & $\frac{23}{72}$

Sit quamvis numerale minus, vidē fractio major An sit; ut imminuat citò sola reductio fractos.

$3\frac{2}{3}-\frac{3}{7}\cdot\frac{2}{3}$ major fractio. Itaq; $\frac{2}{3}\cdot\frac{3}{7}=\frac{5}{21}$. Resid. $3\frac{5}{21}$

Dati numeri, Integri vel fracti, dicere *partem datam.* Ducta sit in *numerum data pars*; quam quæris, habetur.

Postulantur $\frac{2}{3}$ de 18. $\frac{2}{3}\times\frac{18}{1}=12.\quad \frac{2}{3}$ de $\frac{9}{14}=\frac{3}{7}$.

Reductio integri in partes; vel contra.

In partes *solvis* totum; si *pars* placet *una.*
Partes in totum *religas*, si dividat *una.*

12lib. $\times$ 20s. $=$ 240s. $\times$ 12d. $=$ 2880d. $\times$ 4q. $=$ 11520q.

11520q (2880d (240s (12lib.
4 12 20

¶Monas, *principium* Numerorum, Integri vel Fracti; & *princeps* numerus est.

Simplex rite potest tantùm Monas, alter & omnis *Compositus* dici numerus. Neque enim æqua revellit
A numeris monadem ratio. Si quæstio fiat,
Quot pondo? quidni bene respondebitur, unum.
Una monas *quanta est*; monadum aut *cumulatio, non est.*
Usque etenim *nil* si accumules, tamen usque manet *nil.*
At monas *ascensu integros* magis auget ut omnes;
Sic *descensu* etiam *fractos* premit, usque minores.
Nullos multiplicat nec dividit *una*; sed omnes
Metitur numeros; metitur & *unica primos.*

Hactenus

Hactenus de Fractione *Communi*, ſequitur *Specialis*: Decimalis vel Sexageſimalis.

Si *Decas*, aut *Hexecontas* ſit *nominis* index; *Altera* contrectat numeros, nova & *altera* praxis.

Com. $\frac{1}{2}$. Decim. $\frac{5}{10}$. Sexag. $\frac{30}{60}$.

Datâ *Communi* fractione, dicere *Specialem*:
Signum nominis ad ſignum numerale per omnes
Confer, ut analogos pariat collatio, fractos

Com. 2 : 1 : : Dec. 10 : 5. :: Sexag. 60 : 30.

Fractio Decimalis.

Communem in Decimalem vertere.

In decimalem exit communis fractio; ciphris
Si numeralem auctam, nota nominis hauriat aptè.

$\frac{1}{2}; \frac{10}{2} = (5. \quad \frac{3}{4}; \frac{300}{4} = 75.$

Si nota ter redit, haud aliam unquam calculus edit.

$\frac{1}{3}; \frac{1000}{3} = 333. \quad \frac{2}{3}; \frac{2000}{3} = 666$ &c.

3 : 1 :: 1000 : 333. &c.

Separat integris *punctum* vel *linea* fractos;
Nec *nota* ſubjicitur quæ *nominat*; utq; ſiniſtro
Integer *accreſcit*; ſic fractus in ordine dextro
Decreſcit: *monadem* decimalem *linea* fractrix
Subnotat; & *Ciphras* tot *ſub* quotcunq; *figuris*.

4 .75. vel $4'75.$ i.e. $4.\frac{75}{100}$.

Index & Valor & Numerus per Schema ſciuntur.

Indices.	3.	2.	1.	0.	$\bar{1}.$	$\bar{2}.$	$\bar{3}.$
Valores.	M.	C.	X.	I.	X.	C.	M.
Integri.	4	3	2	1.	*2	3	4

*Fracti.

Si *numeratoris* Ciphram ſubjecta *ſecundam Dextra* figura ſubit quæ *nominat*, *una* præibit Ciphra notas omnes decimales: ſi nota Ciphram Dextra ſubit *trinam*, decimales *bina* præibit. *Plures*; ſi nota *dexterior* ſubit ordine Ciphram.

Ciphra *ſiniſtra* locum *mutat*; ſed *dextra redundat*.

$\frac{5}{20} = 25$. viz. $\frac{500}{20}$ (25. $\frac{1}{20} = 05$. viz. $\frac{100}{20}$ (05.

$\frac{2}{240} = 0083$ viz. $\frac{20000}{240}$ (0083.

Exam. 20 : 5 :: 100 : 25. 20 : 1 :: 100 : 05.

Formæ Praxeon.

Utere communi praxi; ſed fragmina puncto Fida, locâ: *totum* aut *reliquum* inſita *puncta* gubernant. Factores, quot habent; totidem decimalia, Factus; Tot, quot Dividuus, Quotus & Diviſor habebunt.

Add.	25	1671	
	4	149	
	30	1161	Summa
Subſtr.	4	149	
	25	1671	Reſid.

Mult

Mult. 25 '671
4 '49

231039
102684
102684

115'26279

Divis. 4,'49) 115 '26279 (25 '671.

Si decimalia, nec Factus Factoribus, æqua;
Nec cum Dividuo Quotus & Divisor, haberent:
Quot desunt, Ciphras facto præpone, quotove,
Negligit à lævâ positas operatio Ciphras.

1. Exem.

Multipl. 4'326
'0012

'8652
'4326

'0051912 Examen. '0012)'0051912 (4'326.

2. Exem.

Divis. 3)'204(68 fit '068,

Examen 3 × '068 = '204.

Usus

Usus Indicum.

Cum membra integris coeant decimalia; praxis
Certior est; si quæ sedes facto, additus index
Factorum ostendat; quæ sitve quoto data, monstret
Indice dividuo demptus qui dividit, index.

Multiplicatio

Indices 2 1 0 1 $\bar{1}$ $\bar{2}$ $\bar{3}$

1 Factor 5 3 4
2 Factor 3 2 1

5 3 4
1 0 6 8
1 6 0 2

N. Factus. 1 7 1 4 1 4

$\bar{1}+\bar{2}$ . . . $\bar{3}$
$1 \times 4 = 4$
$\bar{1}+\bar{1}$ . . . $\bar{2}$
$1 \times 3 = 3$
$\bar{1}+0$ . . . $\bar{1}$
$1 \times 5 = 5$
$0+\bar{2}$ . . . $\bar{2}$
$2 \times 4 = 8$
$0+\bar{1}$ . . . $\bar{1}$
$2 \times 3 = 6$
$0+0$ . . . 0
$2 \times 5 = (1)0$
$1+\bar{2}$ . . . $\bar{1}$
$3 \times 4 = (1^*)2$
$1+\bar{1}$ . . . 0
$3 \times 3+1^* = (1\dagger)0$
$1+0$ . . . 1
$3 \times 5+1\dagger = (1)6$

Divisio

1 0 $\bar{1}$ 2 1 0 1 2 3 0 1 2 Divisor *signo* indiculi, se *dispare* jungit
32'1) 17 1 '4 1 4 (5 '3 4. Dividui indiculo; sedes sic nota quotorū est.

Ablat.	160	5	Tolle	1 3 $\bar{1}$ 1 $\bar{1}$ 0 3 de 17. i.e. 3) 17 (5
Resid.	10	91		
Ablat.	9	63	Tolle	1 0 $\bar{1}$ 0 $\bar{1}$ 3 de 10. i.e. 3) 10 (3
Resid.	1	284		
Ablat.	1	284	Tolle	1 $\bar{1}$ $\bar{1}$ $\bar{1}$ $\bar{1}$ 3 de 12. i.e. 3) 12 (4
	0	000		Fractio

Fractio Sexagesimalis

Si nota quæ numerat *Sexagenam* cadat intrà; *4ª. 5ᵇ.
ª*Literaq;* indicium *numerale* aut **linea signet; **7'. 8".
Nilq; loco sexagenæ quæ *nominat*, exstet;
Fractio ab Astrologo *sexagenaria* dicta est.

Circulus in ª duplò ter sexaginta secatur; ª360°.
In sexaginta rursum ᵇ*Gradus*, ᶜ*Hora*, ᵈ*Minutum*, ᵇ60°.60'.60".
Ter decuplus ᶜGradus in *Signo*: duodenaq; Signa ᶜ30°.
Zodiacum intexunt, alterna palatia solis.

Syderea *hora* fluit pars bis duodena diei;
Horæ, sexagena *minuta*; *secunda*, minuti:
☉Bis ter sexaginta dies, plus hectade ferme ☉ 365ª.5ᵇ.49ᶜ.
Annus *Solis* habet; ferme ☽ minus hectade, *Lunæ*. ☽ 354ª.8ᵇ.49ᶜ.
Partibus his regitur sexagenaria praxis;
Inq; notas *minimas* variæ *omnia* membra reducit:
Fragmina quæ *complent monadem*, in *loca proxima* migrant.

Praxis Sexagesimalis.

Additio.				Subtractio.			
Ab ♈ ad ♎.	186ª.	18ᵇ.	30'.	365.	5.	49.	
A ♎ ad ♈.	178.	11.	19.	178.	11.	19.	
Annus	365.	5.	49.	186.	18.	30.	

Multiplicatio per 3 & Divisio.

365×24=8760+5=8765×60=525900+49=
(27' (17h. d
=525949×3=1577847 =26297 =1095 (3 Ann.
60 24 365

1Annus 365ª. 5ᵇ. 49'. 3Ann.)1095ª.17ᵇ.27'.(365ª.5ᵇ.49'.
3
3Anni. 1095. 17. 27.

Datis

Datis, periochâ annorum & die mensis dicere dies, horas, minuta temporis.

Deme [a] datis *monadem* : *menses* mutare *diebus*
Perge suis ; [b] diem ad usque dati, *in problemate*, mensis :
[c] Unius æquè omnes annos intrude diebus.
Una [f] homas è numero coalescat utroque dierum.
Divide rursum annos, per [m] *quatuor* : inde per *unum*
[n] *Triginta centum* : annorum [p] *quotus ille* diebus
[p] *Addendus* : [q] *quotus hic* alter [q] *demendus eisdem* :
(*Bissexti* desunt; * *undena minuta* supersunt). *11′ : 1 ^{20 ∞} : : 1440 : (131. ferè.
Trude *dies* tandem in viginti quatuor, [s] *hora*
Fiunt ; trusæ horæ in [v] decies sex, facta [v] *minuta*.

Exempl. Postulatur ; Quot dies, horæ, minuta, in annis 1682. April 12^d.

Anni 1682 − [a] 1 = 1681 × [c] 365 = 613565^d.
Menses 4 − [a] 1 = 3. ie. 90^d. + [b] 12^d April = 102
a Cal. Jan.

613667
Bissexti [m] 4) 1681 . . . . (add. [p] 420 + 6^h.

[p] 614087^d. + 6^h.
Excessus Julianorum annorum *Subt.* . . . . [q] 12^d. + 20^h.

[n] 131) 1681 (12^d. $\frac{109}{131}$ i.e. [q] 12^d. 20^h fere. i.e. 19^h. 58′

614074^d. + *10^h.

Nam 131 : 109 : : 24^h : 19^h + $\frac{127}{131}$

127 × 60 = $\frac{7620}{131}$ = 58′.

Mult. per [s] 24

14737776
*10

14737786 [s] horæ.

Mult. per [v] 60

884267160 [v] minuta

Respondetur in annis 1682. April. 12.
Continentur 614074^d. = 14737786^h. = 884267160′.

Metho-

¶ Methodus convertendi *ſexageſimum* in *decimale* fragmentum; & vice verſâ.

Dat monas ut decimum :: ſic ſenio : ſexagenum.
1 : 1/7 :: 6 : 42'. vel 10 : 1/7 :: 60 : 42'.
6 : 42' :: 1 : 1/7. vel 60 : 42' :: 10 : 1/7.
Integra cum variis ſi ſint mutanda minutis;
Fit ſexagenum in decimum, contra hoc fit in illud;
Id ſi dividet; hoc ſi *ſenio* multiplicabit.

1 Converſio ſexageſimalium in decimale.

Singula ſexagena unum in decimale novantur.
Integra læva locum retinent intacta ſupremum:
Deſcenſu obliquo ſexagenaria membra
Scribe loco minus uno, ad dextram; dividat *hectas*
Infima; ponantur *quota*, proxima *ſexagenis*;
Quilibet uſque ſequens præcedenti ordo ſuperſtet.

2 Converſio decimalis in ſexageſimalia.

Mutatur decimale in ſexageſima plura;
Hectade ſi dextrâ implicites decimale *ſupremum*;
Subque ſuo rectè *factum factore* reponas;
Extremum ſed ſexagenum *linea* punctet.

Clarè exemplar idem praxin manifeſtat utramvis.

Exempl. 127°. 32'. 00". 09'". 45"".

127° | 5 3 3 3 7 8 4 7 2 2 &c. × 6
32' | 0 0 2 7 0 8 3 3 3 &c.
0 0" | 1 6 2 5 0 0 0 &c.
0 9'" | 7 5 0
6) 4 5"" | 0

Aut *ſexageno*, aut *decimali* ſubjice *nomen*,
Fragmen *commune* eſt; huic *nomen* tolle, reponis:
Diſpar *communi* tamen & *ſibi*, fragmen *utrumque*.

Exempl. Dec. 1/7. Sexag. 7'. fiunt communes minutiæ;

Viz. $\frac{7}{10}$ $\frac{7}{60}$. Sed communes $\frac{7}{8}$. $\frac{7}{9}$ Nec fiunt decimales nec ſexageſimales, *analoga*.

Integra

Typus Decimalis & Sexagenariæ Praxeos.

1°. Praxis Decimalis.

$365^d.\ 5^h.\ 49' : 360° :: 1^d :$ Quæsitum.

$5^h.\ 49'$. reducuntur ad $^1 24236111$ decimal.

1°. 49 per 60. 60) 490000 (81666666 &c.

2°. 5^h. per 24. 24) 5.81666666 (24236111 &c.

$365^d.\ ^1 24236111 : 360° :: 1^d :$ Quæsitum.

365 ^{1}24236111) 360^{1}00000 &c. (985646897.

011897502433
026756715521
035547484052
032774137294
025191955396
017128889984
023627430665
020624861122
031281875001

36524236111) 36000000000000000000 (985646897
328718124999
292193888888
182621180555
219145416666
146096944444
219145416666
292193888888
328718124999
255669652777

1.	36524236111
2.	73048472222
3.	109572708333
4.	146096944444
5.	182621180555
6.	219145416666
7.	255669652777
8.	292193888888
9.	328718124999

36000000000000000000

Praxis Sexagenaria

1440 × 360 = 518400

365d. 5h. 49′ = 525949′ Z 360. 518400

1d. = 1440 0. 525949

(733009)
480655

518400×60 31104000(59′
2629745
4733541

(172948)

73009×60 = 4380540 (8″
4207592

(383849)
511739

525949 { 172948×60 = 10376880 (19‴
525949
4733541

(415133)
199298

383849×60 = 23030940(43iv
2103796
1577847

(188377)
387002

415133×60 = 24907980(47v
2103796
3681643

1.	525949
2.	1051898
3.	1577847
4.	2103796
5.	2629745
6.	3155694
7.	3681643
8.	4207592
9.	4733541

Mutua Decimalium & Sexagesimalium conversio.

985646897. × 6

59′ | 13881382.

8″ | 3288292.

19‴ | 729752.

43iv | 78512.

47v | 1072.

Fragmina se *trina fortis*, quibus usa Matheſis,
Assimulant; brevis indicio collata tabellæ;
Prompta sit ad facilem ut primaria copia praxin:
Plura, per exemplar, Tyronis calculus addat.
Omnia nec cumulâsse opus est momenta; nec ultra
Aut quartum decimale, aut tertia Sexagena.
Punctum, nil ultra; sed *crux*, plus indicat ultra.
Quo primum afficitur signo, omnia membra notantur.

Conversio Minutiarum Communium ad Decimales & Sexagesimales.

Com.		Decimales	Sexagesimæ.
1/2	5/10	·5.	30′.
1/3	3/9	·333+	20′.
	6/9	·666	40.
1/4	2/8	·25.	15′.
	6/8	·75.	45.
1/5	2/10	·2.	12′.
	4/10	·4.	24.
	6/10	·6.	36.
	8/10	·8.	48.
1/6	3/9	·1666+	10′.
	5/9	·8333	50.
1/7	1/7	·1428+	8′. 34″. 17‴+
	2/7	·2857	17. 8. 34
	3/7	·4285	25. 42. 51
	4/7	·5714	34. 17. 8
	5/7	·7142	42. 51. 25
	6/7	·8571	51. 25. 42
1/8	1/8	·125.	7′. 30″.
	3/8	·375.	22. 30.
	5/8	·625.	37. 30.
	7/8	·875.	52. 30.
1/9	1/9	·111+	6′. 40″.
	2/9	·222	13. 20.
	4/9	·444	26. 40.
	5/9	·555	33. 20.
	7/9	·777	46. 40.
	8/9	·888	53. 20.
1/10	1/10	1.	6′.
	3/10	·3.	18.
	7/10	·7.	42.
	9/10	·9.	54.
1/11	1/11	·0909+	5′.27″.16‴+
	2/11	·1818	10.54.32
	3/11	·2727	16.21.49
	4/11	·3636	21.49. 5
	5/11	·4545	27.16.21
	6/11	·5454	32.43.38
	7/11	·6363	38.10.54
	8/11	·7272	43.38.10
	9/11	·8181	49. 5.27
	10/11	9090	54.32.43

Com.		Decimales	Sexagesimæ
	1/12	·0833+	5′.
1	2/12	·4166	25.
1/12	3/12	·5833	35.
	11/12	·9166	55.
	1/13	·0769+	4′.36″.55‴+
	2/13	·1538	9.13.50
	3/13	·2307	13.50.46
	4/13	·3076	18.27.41
	5/13	·3846	23. 4.36
1	6/13	·4615	27.41.32
1/13	7/13	·5384	32.18.27
	8/13	·6153	36.55.23
	9/13	·6923	41.32.18
	10/13	·7692	46. 9.13
	11/13	·8461	50.46. 9
	12/13	·9230	55.23. 4
	1/14	·0714	4′.17″. 8‴+
	2/14	·2142	12.51.25
1	3/14	·3571	21.25.42
1/14	4/14	·6428	38.34.17
	11/14	·7857	47. 8.34
	13/14	·9285	55.42.51
	1/15	·0666+	4′.
	2/15	·1333	8.
	4/15	·2666	16.
1	7/15	·4666	28.
1/15	8/15	·5333	32.
	11/15	·7333	44.
	13/15	·8666	52.
	14/15	·9333	56.

Com.		Decimales	Sexagesimæ
	1/16	·0625.	3′.45″.
	3/16	·1875.	11.15.
1	5/16	·3125.	18.45.
1/16	7/16	·4375.	26.15.
	9/16	·5625.	33.45.
	11/16	·6875.	41.15.
	13/16	·8125.	48.45.
	15/16	·9375.	56.15.
	1/17	·0588+	3′.31″.45‴+
	2/17	·1176	7. 3.31
	3/17	·1764	10.35.17
	4/17	·2352	14. 7. 3
	5/17	·2941	17.38.49
	6/17	·3529	21.18.35
1	7/17	·4117	24.42.21
1/17	8/17	·4705	28.14. 7
	9/17	·5294	31.45.52
	10/17	·5882	35.17.38
	11/17	·6470	38.49.24
	12/17	·7058	42.21.10
	13/17	·7647	45.52.56
	14/17	·8235	49.24.42
	15/17	·8823	52.56.28
	16/17	·9411	56.28.14
	1/18	·0555	3′.20″.
	2/18	·2777	16.40.
1	7/18	·3888	23.20.
1/18	11/18	·6111	36.40.
	13/18	·7222	43.20.
	17/18	·9444	56.40.

Com.	Decimales	Sexagesimæ
1/19	·0526+	3′. 9″.28‴+
	·1052	6.18.56
	·1578	9.28.25
	·2105	12.37.53
	·2631	15.47.22
	·3157	18.56.50
	·3684	22. 6.18
	·4210	25.15.47
	·4736	28.25.15
	·5263	31.34.44
	·5789	34.44.12
	·6315	37.53.41
	·6842	41. 3. 9
	·7368	44.12.37

Com.	Decimales	Sexagesimæ
	·7894+	47′.22″. 6‴+
	·8421	50.31.34
	·8947	53.41. 3
	·9473	56.50.31
	·05.	3′.
	·15.	9.
	·35.	21.
1/20	·45.	27.
	·55.	33.
	·65.	39.
	·85.	51.
	·95.	57.

Converſio Decimalium & Sexageſimalium ad Communes minutias.

Fragmen [a] *utrumque* itidem redit ad [b] *Commune*; retrudat Ambo ſi * *Menſura* notam * *Communis* ad imam. Non enim, uti *reliqua*, Communis fractio *Nomen Unum* habet; innumeris ſed inenarrabile formis.

1. Decim. [a]5. ie. $\frac{5^{c}}{10}$ *5) $\frac{5}{10}$ ($\frac{1^{b}}{2}$.

[a]125 i.e. $\frac{125}{1000}$. *125) $\frac{125}{1000}$ ($\frac{1^{b}}{8}$.

2. Sexag. [a]30′. i.e. $\frac{30}{60}$ *30) $\frac{30}{60}$ ($\frac{1^{b}}{2}$.

[a]24′. i.e. $\frac{24}{60}$. *12) $\frac{24}{60}$ ($\frac{2^{b}}{5}$.

Sexagena

Sexagena ſimul variæ ſi fragmina ſortis
Occurrant; per [d] *ſex decies*, [f] *numerale* fit unum:
[g] Commune [f] huic præbent ducta in ſe nomina [g] *nomen*:
Fragmen & id, [b] minimam ad ſpeciem, * menſura reducit.

$33'.20''.=\frac{5}{9}$. viz. $\frac{33}{60}, \frac{20}{60}$ || $\frac{33}{60}\times\frac{60}{\times}+\frac{20}{60}=$ *4) $\frac{2000f}{3600g}$ ($\frac{5b}{9}$.

$8'.34''.17'''=\frac{1}{7}$. viz. $\frac{8}{60}.\frac{34}{60}.\frac{17}{60}$. $\frac{8}{60}\times\frac{60}{\times}+\frac{34}{60}=\frac{514}{\times}\times 60+$

$17=30857$
$60=216000$. $30857)\frac{30857}{216000}(\frac{1}{7}$.

Decimales	Com.	Sexageſimæ
·05.	$\frac{1}{20}$	3'.
·0526 +	$\frac{1}{19}$	3'. 9''.28''' +
·0555 +	$\frac{1}{18}$	3.20.
·0588 +	$\frac{1}{17}$	3.31.45 +
·0625.	$\frac{1}{16}$	3.45.
·0666 +	$\frac{1}{15}$	4.
·0714 +	$\frac{1}{14}$	4.17. 8 +
·0769 +	$\frac{1}{13}$	4.36.55 +
·0833 +	$\frac{1}{12}$	5.
·0909 +	$\frac{1}{11}$	5.27.16 +
·1.	$\frac{1}{10}$	6'.
·1052 +	$\frac{2}{19}$	6'.18''.56''' +
·111 +	$\frac{1}{9}$	6.40.
·1176 +	$\frac{2}{17}$	7. 3.31 +
·125.	$\frac{1}{8}$	7.30.
·1333 +	$\frac{2}{15}$	8.
·1428 +	$\frac{1}{7}$	8'.34''.17''' +
·15.	$\frac{3}{20}$	9.
·1538 +	$\frac{2}{13}$	9.13.50 +
·1578 +	$\frac{3}{19}$	9.28.25 +
·1666 +	$\frac{1}{6}$	10.

Decimales	Com.	Sexageſimæ
·1764 +	$\frac{3}{17}$	10'.35''.17''' +
·1818 +	$\frac{2}{11}$	10.54.32 +
·1875 +	$\frac{3}{16}$	11.15.
·2.	$\frac{1}{5}$	12'.
·2105 +	$\frac{4}{19}$	12'.37''.53''' +
·2142 +	$\frac{3}{14}$	12.51.25 +
·222 +	$\frac{2}{9}$	13.20.
·2307 +	$\frac{3}{13}$	13.50.46 +
·2352 +	$\frac{4}{17}$	14. 7. 3 +
·25.	$\frac{1}{4}$	15.
·2631 +	$\frac{5}{19}$	15.47.22 +
·2666 +	$\frac{4}{15}$	16.
·2727 +	$\frac{3}{11}$	16.21.49 +
·2777 +	$\frac{5}{18}$	16 40.
·2857 +	$\frac{2}{7}$	17. 8.34 +
·2941 +	$\frac{5}{17}$	17.38.49 +
·333 +	$\frac{1}{3}$	20'.
·3.	$\frac{3}{10}$	18'.
·3076 +	$\frac{4}{13}$	18'.27''.41''' +
·3125 +	$\frac{5}{16}$	18.45.

Decimales	Com.	Sexagesimæ
·3157+	6/19	18′.56″.50‴+
·35.	2/20	21.
·3529+	6/17	21.18.35 +
·3571+	5/14	21.25.42 +
·3636+	4/11	21.49.5 +
·3684+	7/19	22.6.18 +
·375.	3/8	22.30.
·3846+	5/13	23.4.36 +
·3888+	7/18	23.20.
·4.	2/5	24′.
·4117+	7/17	24′.42″.21‴+
·4166+	1/12	25.
·4210+	8/19	25.15.47 +
·4285+	3/7	25.42.51
·4375+	7/16	26.15.
·45.	9/20	27.
·4545+	5/11	27.16.21 +
·4615+	6/13	27.41.32 +
·4666+	7/15	28.
·4705+	8/17	28.14.7 +
·4736+	9/19	28.25.15 +
·5.	1/2	30′.
·5263+	10/19	31′.34″.44‴+
·5294+	9/17	31.45.52 +
·5333+	8/17	32.
·5384+	7/13	32.18.27 +
·5714+	4/7	34.17.8 +
·5789+	11/19	34.44.12 +
·5833+	7/12	35.
·5882+	10/17	35.17.38 +
·6.	3/5	36′.
·6111+	11/18	36′.40″.
·6153+	8/13	36′.55″.23‴+
·625.	5/8	37′.30″.

Decimales	Com.	Sexagesimæ
·6315+	12/19	37′.53″.41‴+
·6363+	7/11	38.10.54 +
·6470+	11/17	38.49.24 +
·6428+	9/14	38.34.17 +
·65.	13/20	39.
·666 +	2/3	40.
·6842+	13/19	41.3.9 +
·6875.	11/16	41.15.
·6923+	9/13	41.32.18 +
·7.	7/10	42′.
·7058+	12/17	42′.21″.10‴+
·7142+	5/7	42.51.25 +
·7222+	13/18	43.20.
·7272+	8/11	43.38.10 +
·7333+	11/15	44.
·7368+	14/19	44.12.37 +
·75.	3/4	45.
·7647+	13/17	45.52.56 +
·7692+	10/13	46.9.13 +
·777 +	7/9	46.40.
·7857+	11/14	47.8.34 +
·7894+	15/19	47.22.6 +
·8.	4/5	48′.
·8125+	13/16	48′.45″.
·8181+	9/11	49′.5.27‴+
·8235+	14/17	49.24.42 +
·8333+	5/6	50.
·8421+	16/19	50.31.34 +
·8461+	11/13	50.46.9 +
·85.	17/20	51.
·8571+	12/14	51.25.42 +
·8666+	13/15	52.
·875.	7/8	52.30.
·8823+	15/17	52.56.28 +
·888 +	8/9	53.20.
·8947+	17/19	53.41.3 +

Deci-

Decimales	Com.	Sexageſimæ	Decimales	Com.	Sexageſimæ
·9.	9/10	54′.	·9333+	14/15	56′.
·9090+	10/11	54′.32″.43‴+	·9375+	15/16	56″.15″.
·9166+	11/12	55.	·9411+	16/17	56′.28″.14‴+
·9230+	12/13	55.23.4+	·9444+	17/18	56.40.
·9285+	13/14	55.42.51+	·9473+	18/19	56.50.31+

Sexageſimæ	Com.	Decimales	Sexageſimæ	Com.	Decimales
10′.	1/6	·166+	22′.30″.	3/8	·375.
10′.35″.17‴+	2/17	·1764+	23′. 4″.36+	5/13	·3846+
10.54.32+	2/11	·1818+	23.20.	7/18	·3888+
11.15.	3/16	·1875+	24.	2/5	·4.
12.	1/5	·2.	24.42.21+	7/17	·4117+
12.37.53+	4/19	·2105+	25.	5/12	·4166+
12.51.25+	3/14	·2142+	25.15.47+	8/19	·4210+
13.20.	2/9	·222+	25.42.51+	3/7	·4285+
13.50.46+	3/13	·2307+	26.15.	7/16	·4375.
14. 7. 3+	4/17	·2352+	26.40.	4/9	·444+
15.	1/4	·25.	27.	2/20	·45.
15.47.22+	5/18	·2361+	27.16.21+	5/11	·4545+
16.	4/15	·266+	27.41.32+	6/13	·4615+
16.21.49+	3/11	·2727+	28.	7/15	·466+
16.40.	5/18	·2777+	28.14. 7+	8/17	·4705+
17. 8.34+	2/7	·2857+	28.25.15+	9/19	·4736+
17.38.49+	5/17	·2941+	3.	1/20	·05.
18.	3/10	·3.	3. 9.28+	1/19	·0526+
18.27.41+	4/13	·3076+	3.20.	1/18	·0555+
18.45.	5/16	·3125.	3.31.45+	1/17	·0588+
18.56.50+	6/19	·3157+	3.45.	1/16	·0625.
20.	1/3	·333+	30.	1/2	·5.
21.	7/20	·35.	31.34.44+	10/19	·5263+
21.18.35+	6/17	·3529+	31.45.52+	9/17	·5294+
21.25.42+	5/14	·3571+	32.	8/17	·5333+
21.49. 5+	4/11	·3636+	32.18.27+	7/13	·5384+
22. 6.18+	7/19	·3684+	32.43.38+	6/11	·5454+

Sexagesimæ	Com.	Decimales
33.	11/20	·55. +
33′.20″.	5/9	·555 +
33′.45″.	9/16	·5625.
34′.17″. 8‴ +	4/7	·5714 +
34.44 .12 +	11/19	·5789 +
35.	7/12	·5833 +
35.17 .38 +	10/17	·5882 +
36.	3/5	·6.
36.40 .	11/18	·6111 +
36.55 .23 +	8/13	·6153 +
37.30 .	5/8	·625.
37.53 .41 +	12/19	·6315 +
38.10 .54 +	7/11	·6363 +
38.34 .17 +	9/14	·6428 +
38.49 .24 +	11/17	·6470 +
39.	13/20	·65.
4.	1/15	·066 +
4.17 . 8 +	1/14	·0714 +
4.36 .55 +	1/13	·0769 +
40.	2/3	·666 +
41. 3 . 9 +	13/19	·6842 +
41.15 .	11/16	·6875 +
41.32 .18 +	9/13	·6923 +
42.	7/10	·7.
42.21 .10 +	12/17	·7058 +
42.51 .25 +	5/7	·7142 +
43.20 .	13/18	·7222 +
43.38 .10 +	8/11	·7272 +
44.	11/15	·733 +
44.12 .37 +	14/19	·7368 +
45.	3/4	·75.
45.52 .56 +	13/17	·7647 +
46. 9 .13 +	10/13	·7692 +
46.40 .	7/9	·777 +
47. 8 .34 +	11/14	·7857 +
47.22 . 6 +	15/19	·7894 +
48.	4/5	·8.

Sexagesimæ	Com.	Decimales
48′.45″.	13/16	·8125.
49′.24″.42‴ +	14/17	·8235 +
49. 5 .27 +	9/11	·8181 +
5.	1/12	·0833 +
5.27 .16 +	1/11	·0909 +
50.	5/6	·833 +
50.31 .34 +	16/19	·8421 +
50.46 . 9 +	11/13	·8461 +
51.	17/20	·85.
51.25 .42 +	6/7	·8571 +
52.	13/15	·866 +
52.30 .	7/8	·875.
52.56 .28 +	15/17	·8823 +
53.20 .	8/9	·888 +
53.41 . 3 +	17/19	·8947 +
54.	9/10	·9.
54.32 .43 +	10/11	·909 +
55.	11/12	·9166 +
55.23 . 4 +	12/13	·9230 +
55.42 .51 +	13/14	·9285 +
56.	14/15	·933 +
56.15 .	15/16	·9375.
56.28 .14 +	16/17	·9411 +
56.40.	17/18	·9444 +
56.50 .31 +	18/19	·9473 +
57.	19/20	·95.
6.	1/10	·1.
6.18 .56 +	2/19	·1052 +
6.40 .	1/9	·111 +
7. 3 .31 +	2/17	·1176 +
7.30 .	1/8	·125.
8.	2/15	·1333 +
8.34 .17 +	1/7	·1428 +
9.	3/20	·15.
9.13 .50 +	2/13	·1538 +
9.28 .25 +	3/19	·1578 +

Poſtquam *prima* puer *fundamina* jecerit Artis;
Mox *tenera rationis* opus, ſtudiumque profectæ
Indolis aggredier decet, & dare praxeos uſum.
Seu libet *analogâ* Numeros extendere *ſcalâ*;
Æquo creſcentes, decreſcenteſque logiſmo;
Ponereque ignotis loca; in unam & cogere ſummam,
Nec calamo deſcripta, nec intellecta putanti:
Expedit hoc *Progreſſio*, & *Aurea regula* penſum.
Seu libet è numeris *apodixin* reddere *falſis*;
Indubiumque per *errores* educere *verum*;
Regula Hypotheſeos mira hæc ænigmata ſolvit:
Luſus & ingenuâ pueros docet *arte* jocantes.
Principiis paulò mens *his* inſtructior, audet
Scrutari numeros Geometræ è fontibus hauſtos;
Quadratos, Cubo'que, & qui generantur ab his; &
Analyſin, Geneſinque, Poteſtatumque *latebras*;
Dividuoſque, dato *ſine diviſore* ſecandos,
Eruere; & tenebris *radicem* excire latentem.
Hæc data ſunt Graiæ quaſi *cru?ula blanda* juventæ;
Calleret priùs ut *Numeros*, quàm *Rhetoris artem*.

Proportio *vel* Progreſſio.

Metitur numeros Progreſſio paſſibus æquis.

Progreſſio duplex.

Arithmetica:

Exceſſu æquali *Monadum* it Numeraria climax.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
2.	4.	6.	8.	10.	12.	14.	16.	18.	20.
3.	6.	9.	12.	15.	18.	21.	24.	27.	30.

Geometrica:

Æquali *ratione* ſtruit Geometria *Scalam*.

1 : 2 : 4 : 8 : 16 : 32 : 64.
2 . 6 . 18 . 54 . 162 . 486.

Regulæ

Regulæ *Communes*

De Terminis Arithmeticis & Geometricis.

Datis Numeris duobus, dicere Exceſſum ſive Rationem.

1ª. Indicat exceſſum *minor* à *majore* reſectus.

Dantur 2 & 6. 6-3=3. Exceſſus 3)6(2. Ratio.

Dato exceſſu *vel* ratione, reddere terminos quoſlibet.

Subtrahit Exceſſus, *minuit* Numerum: *Addit* & *auget*: *Dividit* & *Minuit* Ratio: ſin *Multiplat*, *auget*.

3+3=6. 6+3=9. 9+3=12 *i.e.* 3.6.9.12.

12-3=9. 9-3=6. 6-3=3 *i.e.* 12.9.6.3.

2×3=6. 2×6=12. 2×12=24. *i.e.* 3.6.12.24.

2)24(12. 2)12(6. 2)6(3 *i.e.* 24.12.6.3.

Utraque Proportio eſt duplex:

Diſcreta eſt; complet quam terminus uſq; *quaternus*:

Continua eſt; Medius cui terminus uſque *binus*.

2:5::9:12. 2:5:8. 2:6::8:24. 2:6:18.

Reg. *Speciales*,

1°. De Terminis Arithmeticis.

Datis duobus Terminis reddere *medium*.

Reg. Amborum *ſemiſſis* erit *medianus* utrique.

Dantur 3 & 9. 3+9=12. 6. dimidium.

Datis *Exceſſu* & termino *primo*, dicere terminum cujusvis *loci*.

Unum deme *loco*, numerum *exceſſuq;* relictum Multiplica; facto & *primum* adjice: *Terminus* exit.

Requiritur terminus loci 10mi; dantur Exceſ.2. Term.1us.2.

1. 2. 3. 10.

10-1=9. 9× Exceſſ. 2=18. +prim. 2=20. 2. 4. 6. &c. 20.

Datis, numero *locorum* & Terminis *primo* & *ultimo*, dicere *ſummam* Progreſſionis.

Ambo Extrema ſimul ſemiſſi intrude locorum;

Vel loca, ſemiſſi extremorum, omnia; ſumma eſt.

20+2=22, ×5=110. ſumma omnium 10 Terminorum.

20+2=22=11, ×10=110.

2

Dividuum aut *Extrema parem* numerum, aut *Loca* præbent.

Praxeos *unius* Examen regit *altera* Praxis.

2. De

2°. De Terminis Geometricis.

Diſpoſitio terminorum.

Ponitur aſcendente ſub Indice Terminus omnis;
Primo *Cyphra* præeſt, *Numeruſque* ſequentibus, *Index*:
Terminus ergo unam numerat plus *Indice* ſedem.

Indices	0	1	2	3	4	5	6
Termini	1	2	4	8	16	32	64
Nomina	N.	R.	Q.	C.	QQ.	Ss.	QC, &c.

Datis duobus Terminis, dicere medium Proportionalem.

Ductorum in ſeſe *radix*, *mediana* duorum eſt.

Dantur 3 & 12. $3 \times 12 = 36$. Radix 6.

3. 6. 12. Nam. 3 : 6 :: 6 : 12.

Quadratis *media eſt laterum plica* analoga binis.
Dantur 9 & 16. latera 3 & 4. $3 \times 4 = 12$. 9 : 12 : 16.

Datis duobus, dicere medios duos.

Secum ſi Minor, & Factus Majore plicetur,
Radix eſt *medius*: Qui ſi replicabitur in ſe,
Dividet & minor; hic medius fit terminus *alter*:
Primus Terminus eſto *minor*, *majorque ſecundus*.

Dantur 3 & 24. $3 \times 3 = 9 \times 24 = 216$. Radix 6. terminus minor.

$\frac{6 \times 6}{3} = 12$. terminus major. 3 : 6 : 12 : 24.

Utraque Cuborum radix ſi ducitur in ſe;
Utraque rurſus & in ſociam, medianus uterque eſt.

Dant. 8 & 27. radices 2 & 3. $2 \times 2 = 4$. $9 \times 2 = 18$. $3 \times 3 = 9$. $4 \times 3 = 12$. 8 : 12 : 18 : 27.

N.B. Quadratus *monadem*, vel Cubus, ab ordine primo
Si ſequitur; reliquo par ordine quæque Poteſtas.

1 . 4 . 16 . 64 . &c.
1 . 8 . 64 . 512 .

Si

Si ſe Quadratus, vel Cubus; ſi vel utervis Multiplicet ſimilem; ſimilis venit orta Poteſtas.

Q. Q. Q. C. C. C.
$4 \times 4 = 16$: $8 \times 8 = 64$.
$4 \times 16 = 64$: $8 \times 64 = 512$.

Datis ab initio nonnullis Terminis dicere Terminum *cujuſlibet Loci*.

Reg. Per *data* ſigna, loci *quæſiti* confice ſignum *Addendo*: Numeros ſub ſignis confer in unum *Multiplicando*; quod inde reſultat, *divide* primo. vel *Primo* unum partire; *quotum* duc inque *ſecundum*.

Dantur initiales quatuor Termini.
Quæritur Terminus 5tus.

0 1 2 3 $2+3 = 5$
3 : 9 : 27 : 81. $27 \times 81 = 2187 = 729$.
$\overline{3}$

Vel 3) 27 (9 $\times 81 = 729$.

Quæritur *ultimus* terminus, locis octo datis.

3 + 5 = 8
81. 729. $81 \times 729 = 59049 = 19683$.
$\overline{3}$

Si monas orditur ſeriem, diviſio nulla eſt.

0 1 2 3 $3+3 = 6$.
1 : 3 : 9 : 27. $27 \times 27 = 729$.

Datis ratione & terminis primo & ultimo, dicere ſummam omnium terminorum.

Reg. 1. Poſtremum *ratione* plica; *facto* exime *Primum*; Dividat id *ratio*, minor *uno*: fit proba ſumma.

2 : 4 : 8 : 16 : 32 : 64. $64 \times 2 = 128 - 2 = 126$
3 : 9 : 27 : 81 : 243 : 729. $729 \times 3 = 2187 - 3. = 2184 = 1092$.
$\overline{2}$

Reg.

Reg. 2. Inde *ſecundum extremo*; aufer *primumq; quadratum*;
Perque *ſecundum*, ejecto *primo*, divide: ſumma eſt.
3:9:27:81:243:729. 9×729=6561-9=6552=1092.
6

Quando chorum *major* ducit; contraria praxis:
Primo in ſe ducto, *poſtremum* deme, *ſecundo*
Intruſum; *Primuſque Secundo* dividat orbus.
Vel *primum* Ratione auctum, *extremoque* minutum,
Si Ratio, minor uno, dividat: Integra ſumma eſt.

64 : 32 : 16 : 8 : 4 : 2.

Exempl. 64×64=4096 -*64=4032=126 Summa.
i.e. *32×2. *32. = *64-32.

Examen. 64× 2=128 - 2= 126. Summa.

Primus & ultimus; aut medii duo; rite remoti
Hinc inde Extremis, Numerum edunt prorſus eundem.

2 : 4:8:16:32:64. 2:4:8:16:32.
2×64=4×32=8×16=128.
2×32=4×16=8× 8=64.

Quotquot continuè Numeros Geometria profert;
Terminus omnis ad omnem, ut Terminus unus ad unum;
Qui *praît*, & qui *conſequitur*, ſe comparat æquè.
Ante-erit &-*cedens*, ſi poſtremum excipis, omnis;
Con-que-*ſequens* omnis, ſi primum ex ordine tollis.

Termini 2 : 4 :: 8 : 16 :: 32 : 64.
2:4:2+4+8+16+32::4+8+16+32+64. i.e. 2:4::62:124.
Summa *minor primo* ſequitur; *minor ultimo* & anteit.

Terminorum Geometricorum ſumma invenitur per apodixin.

2 : 4 :: 126-64 : 126-2.
Ergo 252-4=504-256. Vid. Poriſm. 4. p. 213
*Tranſp. 256-4=504-252.

Signa (*minus*, vel *plus*) renovant æquantia membra.
Tranſpoſitis fac ſigna ſibi contraria membris.
Sic ſurgit nova ſub variis Æquatio formis.
* Ergo 2) 256-4=504-252 (126. Summa Term.

Vari-

Variatio 8^pla. Terminorum 4^tuor, Analogorum.

Quatuor in Numeris variatur, Analogus ordo.

Ordinat; Alternat; Componit; Dividit; & Con-vertit; & Invertit; Miſcet; Trans-denique-ponit:
Inde fit *æquantis* varium genus *Argumenti*.
Dicitur è duplici numerus prior *Ante*-que-*cedens*,
Alter *Con*-que-*ſequens*; utrinque locatus uterque.

Literæ terminorum Symbola, A vel B, Antecedens. a vel b, Conſequens. Đ, Differentia.

Def.4. *Analogicè.*	12 : 6 :: 8 : 4.	A : a :: B : b.
Def.12. *Alternè.*	12 : 8 :: 6 : 4.	A : B :: a : b.
Def.13. *Inverſe.*	6 : 12 :: 4 : 8.	a : A :: b : B.
Def.14. *Compoſitè.*	12+6 : 6 :: 8+4 : 4	A+a : a :: B+b : b.
	12+8 : 8 :: 6+4 : 4	A+B : B :: a+b : b.
Def.15. *Diviſim.*	12−6 : 6 :: 8−4 : 4	*Dif.* A : a :: *Dif.* B : b.
	12−8 : 8 :: 6−4 : 4	*Dif.* A : B :: *Dif.* a : b.
Def.16. *Converſim.*	12 : 12 $\pm$ 6 :: 8 : 8 $\pm$ 4	A : A $\pm$ a :: B : B $\pm$ b.
	12 : 12 $\pm$ 8 :: 6 : 6 $\pm$ 4	A : A $\pm$ B :: a : a $\pm$ b.
Mixtim.	12+6 : 12−6 :: 8+4 : 8−4.	A+a : A−a :: B+b : B−b.
	12+8 : 12−8 :: 6+4 : 6−4.	A+B : A−B :: a+b : a−b.
Tranſpoſitivè.	12 : 6 :: 8 : 4; vel 8 : 4 :: 12 : 6.	A : a :: B : b; vel B : b :: A : a.

Species

Species Proportionis.

Finditur in varias ſpecies Proportio: * Simplex [a]In binis numeris *Ratio* eſt. [b]Analogia confert [b]Binos hinc atque inde [b]pares. Proportio rurſus Simplex in binis, [c] *rationi* eſt *Congrua*, quando [d]Alter metitur [d] ſocium; vel [e] tertius [f] ambos. Aut [g] *rationi incongrua*; nec menſura duorum eſt.

Inter & [h] *æquales* porrò eſt Proportio binos;

Forma *ejuſdem ad idem*; numeros eadem una per omnes.

* Ratio inter duos Numeros. *Eucl.* l. 5. def. 3.

[a] 2 ad 1 vel 6 ad 3 dupla. [b] 1 : 2 :: 3 : 6. *Eucl.* ibid. def. 4.

[c] Rationalis *Eucl.* 10. def. 1. [d] 9 & [d] 36. 9) 36 (4. [e] 2 ad [f] 18 & [f] 8. 2) $\frac{8}{18}\left(\frac{4}{9}\right.$

[g] Irrationalis 3. 5 & 7. *Eucl.* l. 10. def. 2

[h] 2 ad 2. vel $\frac{1}{2}$ ad $\frac{1}{2}$.

Inter *inæquales*: ſpecies queis *quinque* creantur,

[m] *Majores*; creat his tot (*ſub*) nota, [n] *quinque minores*.

Abnormes voces, metricâ nec lege regendæ.

[m] *Multipla*, *vel* complexa ſemel, *vel* ſæpe, *minorem*:

[o] Una *ſemel* cum [o] *particulâ*; cum [p] *partibus* [p] una;

[q] *Illius* eſt nota ([o] *ſeſqui*) ſimul cum [o] *nomine fracto*:

[p] *Hujus* pars *media* eſt [p] *Numerator*, & *ultima* [p] *Nomen*.

Exempla

Proportio [m] *multiplex*; ut [m] *dupla* 4 ad 2. [m] *tripla* 6 ad 2.

[n] *Submultiplex* ut [n] ſubdupla 2 ad 4. [n] ſubtripla 2 ad 6.

[o] *Superparticularis*, continet minorem ſemel, & inſuper unitatem; ut [o] ſeſqui altera 6 ad 4. 45 ad 30 viz. $1\frac{1}{2}$.

[n] Subſuper particularis, ut [n] ſubſeſquialtera 4 ad 6. 30 ad 45.

N.B. A ſummo, fac, quiſque gradus revocetur ad imum;

ut 45 ad 30. viz. 1. $\frac{15}{30} = 1\frac{1}{2}$.

Pro-

Proportio [p]*ſuperpartiens*, minorem ſemel continet & aliquas unitates; quæ ſimul non menſurant majorem; ut [p] ſuperbipartiens quintas 7 ad 5. $1\frac{2}{5}$. [p]Supertripartiens quintas 8 ad 5. viz. $1\frac{3}{5}$.

[n]*Subſuperpartiens*; ut [n]ſubſuperbipartiens quintas 5 ad 7.

[m]*Multipla*, vel cum [o]*particulâ*; vel [p]*partibus*; ambæ Simplicium formæ, duplici ratione ligantur.

ut dupla ſeſquialtera; 15 ad 6. i.e. $2\frac{1}{2}$. dupla ſupertri-partiens quartas; 11 ad 4. i.e. $2\frac{3}{4}$.

Additio & Subtractio Rationum.

Addere quam facili, aut *rationes* demere Praxi Norit; qui ſimilem *fractorum* noverit uſum.

Additio fit per Multiplicationem.

	1a	2a	3ia	4ta	5ta
Proportiones	2 ad 4.	4 ad 10.	10 ad 15.	15 ad 20.	20 ad 28.
Rationes	2	$2\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{3}$	$1\frac{2}{5}$
Reductæ	$\frac{2}{1}$	$\frac{5}{2}$	$\frac{3}{2}$	$\frac{4}{3}$	$\frac{7}{5}$
Summa Ration.	5	$\frac{5}{1}+\frac{3}{2}=$	$\frac{15}{2}+\frac{4}{3}=\frac{60}{6}$	ic. $\frac{10}{1}+\frac{7}{5}=\frac{70}{5}=14$.	

Subtractio per Diviſionem.

	1a.	2a.
Proportiones	15 ad 6	15 ad 4
Rationes	$2\frac{1}{2}$	$3\frac{3}{4}$
Reductæ	$\frac{5}{2}$	$\frac{15}{4}$
Reſiduum	$\frac{5}{2})\frac{15}{4}(\frac{30}{20}=1\frac{1}{2}$.	

Musica Proportio.

COnficitur *tribus* ex *numeris* Analogia; queis, ut *Discrimen primi* à *medio* : ad *discrimen* habetur *Postremi* à *medio* : : ratio se sic habet æqua 2 : 3 : 6 / 1 . 3 *Primi* : ad *postremum*. Harmoniæ hæc Proportio sola est.

Dato Numero reddere tres Harmonicos.

Reg. Sume dati *duplum*; dempto uno, fitq; *secundus*; *Tertius* exque dato venit involvente *secundum*.

Exem. Datur N.2. dupl.4.-1=3. 2×3=6. Tres Harm. 2.3.6.

Datis tribus Arithmeticis Analogis, reddere tres Harmonicos.

Reg. Terminus, extremos *medius* productus in ambos, Parturit *extremos*; *medium*, *extremi*que plicati.

Exem. Dantur tres Arithmetici Proportionales. 1.2.3. 2×1=2. 2×3=6. 1×3=3. Harmonici. 2.3.6.

Continuatio Proportionis Harmonicæ.

Fertur in immensum Harmoniæ Proportio; si vel Ternio sit ductus *discrimen* in extremorum; Vel si per *discrimen* idem sit ternio sectus: Ultimus in primum transfertur utrinque sequentem; Seu major crescit, seu decrescit minor ordo.

Par ratio, si quis numerus *tres* complicat *idem*.

2. 3. 6. 6.9.18. 18.27.54. 54.81.162.

54.27.18. 18.9. 6. 6. 3. 2. 2. 1. $\frac{2}{3}$.

2.3.6.×2.= 4.6.12.

1 . 3. 1 . 3.

Datis duobus, reddere medium Harmonicum.

Reg. Si minor in discrimen agatur, summa duorum Factum dividat; in medium quotus & minor ibunt.

1. Ex. Dantur 2 & 6. 2 + 6 = 4 × 2 (1. + 2 = 3 medius. 2. 3. 6.
differentia 4. 1 1 3

2. Ex. Dantur 7 & 14. 7 + 14 = 7 × 7 (2⅓ + 7 = 9⅓ medius. 7. 9⅓. 14.
differentia 7. 2⅓. 4⅔

Datis duobus quibuscunque numeris, dicere tres Harmonicos.

Terminus è triplici monstratur Schemate triplex.

Datis Primo & Ultimo, quæritur Medius.

$$\frac{2P \times U}{P+U} = M.$$

1 Exem. P 2. U 6. 2. Exem. P 7. U 14.
2 + 6 = 8 (3 M. 7 + 14 = 21 (9 M.
P 2. M 3. U 6. P 7. M 9. U 14.

Datis Primo & Medio, quæritur Ultimus.

$$\frac{P \times M}{2P - M} = U.$$

1. Exem. P 2. M 3. 2. Exem. P 7. M 9.
4 - 3) 2 × 3 (6 U. 14 - 9) 7 × 9 (14 U.
P 2. M 3. U 6. P 7. M 9. U 14.

Datis Medio & Ultimo, quæritur Primus.

$$\frac{M \times U}{2U - M} = P.$$

1. Exem. M 3. U 6. 2. Exem. M 9. U 14.
12 - 3) 3 × 6 (2 P. 28 - 9) 9 × 14 (7 P.
P 2. M 3. U 6. P 7. M 9. U 14.

Harmonica *Ratio* spectatur inter duos diversos *terminos* sive sonos auribus gratos: est 2ox; vel *Consonantia* συμφωνία, mistura sonorum, gravis & acuti, *simul* editorum; vel *Concinnitas* ἐμμέλεια sonorum *succedentium*. *Rationes* sive *consonantiæ* sunt sex Principaliores. *Ptol. lib. Harmon.* Intelligitur substantivum in his, διὰ πασῶν i.e. χορδῶν: octava i.e. consonantia.

		Consonantiæ.	Termini.	Rationes.
Simplex.				
Διὰ τεσσάρων.		Quarta.	κδ πρὸς ιν 4 ad 3.	Sesquitertia.
Διὰ πέντε.		Quinta.	κδ πρὸς ις 3 ad 2.	Sesquialtera.
Composita ex simplicibus.				
Διὰ πασῶν.	$\frac{4}{3}\times\frac{3}{2}$	Octava.	κδ πρὸς ιβ 2 ad 1.	Dupla.
Decomposita ex compositâ & simplici.				
Διὰ πασῶν καὶ διὰ τεσσάρων.	$\frac{2}{1}\times\frac{4}{3}$	Undecima.	κδ πρὸς θ 8 ad 3.	Dupla superbipartiens tertias.
Διὰ πασῶν καὶ διὰ πέντε.	$\frac{2}{1}\times\frac{3}{2}$	Duodecima.	κδ πρὸς ν 3 ad 1.	Tripla.
Ex compositâ duplici.				
Δὶς διὰ πασῶν.	$\frac{2}{1}\times\frac{2}{1}$	Decima 5ta.	κδ πρὸς ς 4 ad 1.	Quadrupla.

Differentia inter διὰ τεσσάρων καὶ διὰ πέντε vocatur Tonus διὰ δυοῖν: quæ quidem ratio *concinna* est, non verò *consona*.

Diminuta ex simplicibus.				
Διὰ δυοῖν.	$\frac{4}{3}\Big)\frac{3}{2}\Big($	Secunda.	θ πρὸς η 9 ad 8.	Sesquioctava.

$$\frac{4}{3}\Big)\frac{3}{2}\Big(\frac{9}{8} \qquad \frac{\text{κδ}}{\text{ιη}}\Big)\frac{\text{κδ}}{\text{ις}}\Big(\frac{\text{υλβ}}{\text{τπδ}} \text{ per } \mu\eta = \frac{\theta}{\eta}$$

Δίτονος $\frac{81}{64}$ viz. $\frac{9\times9}{8\times8}=\frac{81}{64}$

Partes Toni: Δίεσις $\frac{256}{243}$; Ἀποτομὴ $\frac{2187}{2048}$; Κόμμα $\frac{531441}{524288}$.

Διὰ τεσσάρων − Δίτονος = Δίεσις. $\quad \frac{81}{64}\Big)\frac{4}{3}\Big(\frac{256}{243}$.

Τόνος − Δίεσις = Ἀποτομὴ. $\quad \frac{256}{243}\Big)\frac{9}{8}\Big(\frac{2187}{2048}$.

Ἀποτομὴ − Δίεσις = Κόμμα. $\quad \frac{256}{243}\Big)\frac{2187}{2048}\Big(\frac{531441}{524288}$.

Habetur etiam alter Ditonus concinnior à Recentioribus inventus, qui dicitur imperfectior consonantia; cujus Ratio $\frac{5}{4}$ superparticularis, proxima sesquitertiæ $\frac{4}{3}$.

Ordo rationum $\frac{2}{1}$. $\frac{3}{2}$. $\frac{4}{3}$. $\frac{5}{4}$.

Per hunc Ditonum invenitur etiam Tonus minor cum suis partibus: viz.

Ditonus $\frac{5}{4}$ - Tonus $\frac{9}{8}$ = Tonus minor $\frac{10}{9}$. $\frac{9}{8}$) $\frac{5}{4}$ ($\frac{40}{36}$ = $\frac{10}{9}$

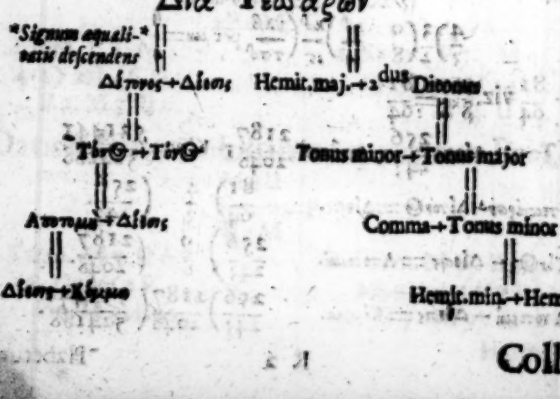
Partes Toni minoris sunt Hemitonus major $\frac{16}{15}$: minor $\frac{25}{24}$

Διὰ πεντέων - Ditonus = = Hemit. maj. $\frac{5}{4}$) $\frac{4}{3}$ ($\frac{16}{15}$

Ton. min. - Hemit. maj. = Hemit. min. $\frac{16}{15}$) $\frac{10}{9}$ ($\frac{150}{144}$ (per 6) = $\frac{25}{24}$

Ton. maj. - Ton. min. = Comma. $\frac{10}{9}$) $\frac{9}{8}$ ($\frac{81}{80}$

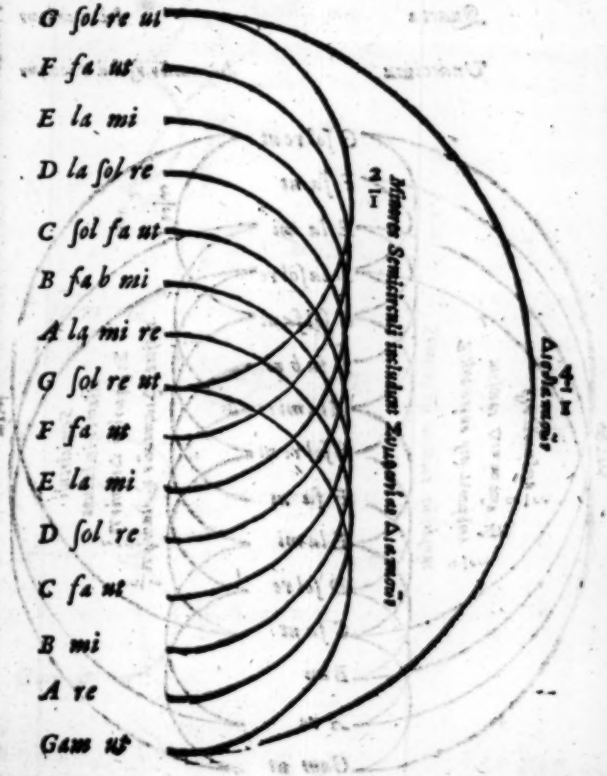
Systema Διὰ Τεσσάρων divisum juxta Musicos Veteres & Recentiores.



Collatio Rationum ad Scalam modernam in quatuor Diagrammatis.

Regulæ Generales 4.

Reg. 1. Intimus [octonum Δια πασων] explicat arcus; Circuit & [duplex octonum] Δις δια πασων.



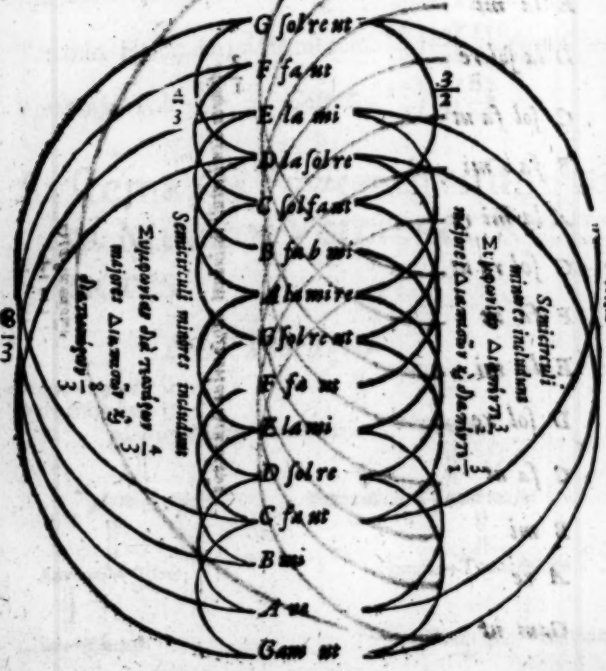
Reg. 2. Litera seu *quinta* est lateris, *duodena* ve, *dextri*; *Quarta* etiam aut *undena*, *sinistri*; consonat æquè: Excipe *B*, sursum hinc: illinc *F*, eundo deorsum. Illinc *F* contrà, sursum; *B*, eundo deorsum.

Nempe *quinta* quævis litera dat consonantiam διὰ πέντε 3/2

Duodecima διὰ πασῶν καὶ διὰ πέντε 3/1

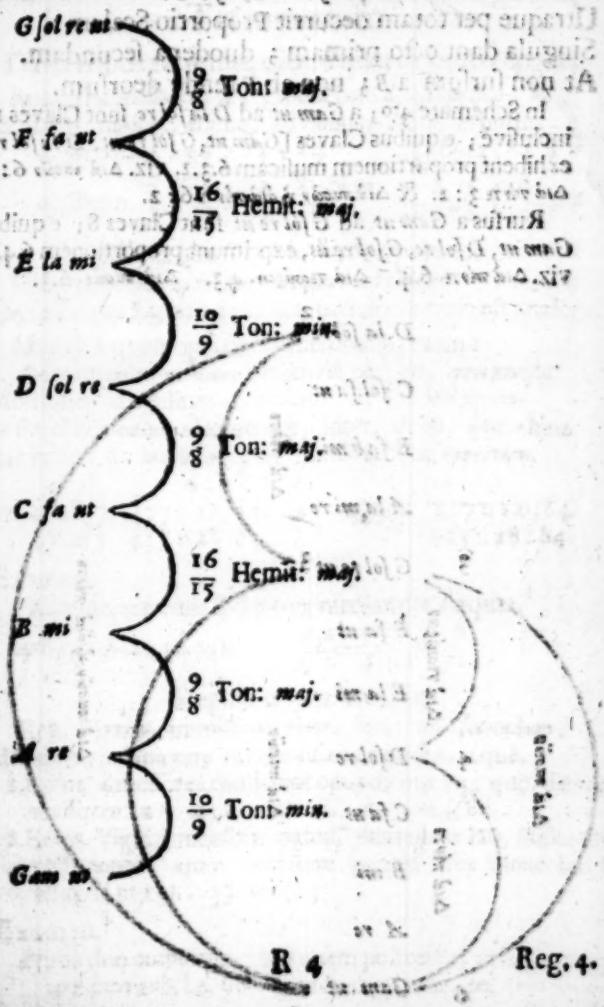
Quarta διὰ τεσσάρων 4/3

Undecima διὰ πασῶν καὶ διὰ τεσσάρων 8/3



Reg. 3.

Reg. 3. Schema Tonos dat & Hemitonu. Scalæq; coaptat.

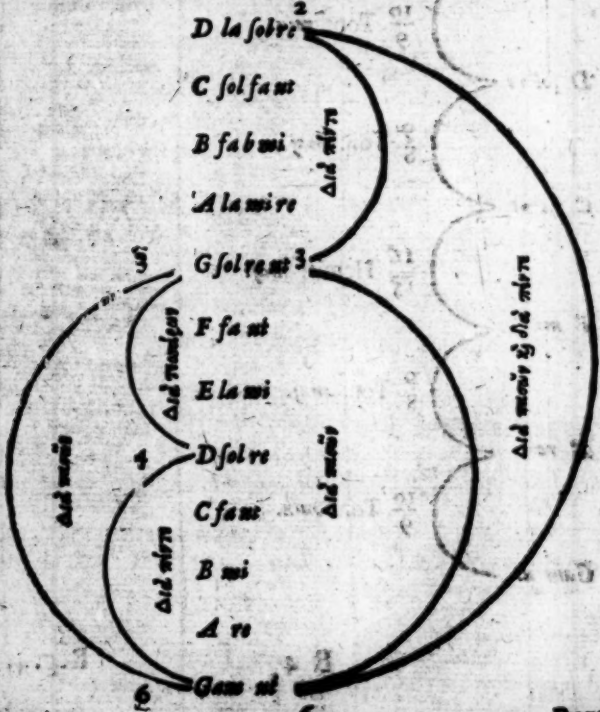


Reg. 4. In Scala, Harmonicas rationes Schema ministrat viz. 6: 4: 3: 6: 3: 2:

Utraque per totam occurrit Proportio Scalam:
Singula dant octo primam; duodena secundam.
At non sursum a *B*; non ab *F* tende deorsum.

In Schemate 4to; a *Gam ut* ad *D la sol re* sunt Claves 12 inclusivè; e quibus Claves [*Gam ut, G sol re ut, D la sol re*] exhibent proportionem musicam 6.3.2. viz. Δια πασῶν 6:3. Δια πεντε 3:2. & Δια πασῶν & δια πεντε 6:2.

Rursus a *Gam ut* ad *G sol re ut* sunt Claves 8; e quibus *Gam ut, D sol re, G sol re ut*, exprimunt proportionem 6.4.3. viz. Δια πεντε. 6.4. Δια τεσσαρων. 4.3. Δια πασῶν. 6.3.



Regula

Regula Aurea Proportionis, ſive Trium Terminorum.

Datis tribus terminis, dicere quartum, Analogiæ.

Reg. *Duc medios* in ſe; productum *divide primo*: Ad majus, majus; minus, ad minus; ambo feruntur.

1. Exem. 4 : 28 :: 12 : 84 4)28×12(84 4tus.

2. Exem. $\frac{3}{4} : \frac{2}{5} :: \frac{1}{6} : \frac{8}{90}$ Nam $\frac{3}{4}) \frac{2}{5} \times \frac{1}{6} (\frac{8}{90}$ 4tus.

Alia atque alia Methodus praxeos.

Interdum *communis* opus *menſura* levabit.

2)4 : 28 :: 12 : 84 (2 : 14 :: 6 : 42. utrinſecus ratio eſt analoga.

Multipla quadruplicem variat diviſio praxin:

1. *Primo* etenim *medium* utrumvis partire; *quotus*que Multiplica in medium *indiviſum*. 2. Divide *primo* Se ſimul & *medium* alterutrum; inter, & eſt, *quota* bina Par ratio; ac *indiviſa* inter, numerumque *repertum*.

4 : 28 :: 12.

1° 4)28(7. 4 : 7 :: 12 : 84. 2° 4)4(1. 1 : 7 :: 12 : 84.
4)12(3. 4 : 3 :: 28 : 84. 1 : 3 :: 28 : 84.

Examen.

Factus ab extremis factum ex mediantibus æquat.

4×84 = 28×12. i.e. 336. $\frac{2}{5} \times \frac{1}{6} = \frac{3}{4} \times \frac{8}{90}$ i.e. $\frac{2}{30}$

Regula trium inverſa.

Reg. *Tertium*, immiſſum *primo*, ſecat ordo *ſecundum*: Ut minus, ad majus; majus valet ad minus, æquè.

1. Exem. 4 meſſores conficiunt opus diebus 24; quot diebus meſſores 12? 4 : 24 :: 12 : 8. 12)4×24(8.

2. Exem. Viginti menſuræ panni, duas ulnas lati, ſufficiunt veſtimento; quot menſuræ panni, tres ulnas lati?

2 : 20 :: 3 : 13⅓. 3)2×20(13⅓

Examen.

Prima duo numerum, duo quem poſtrema, coæquant.

4×24 = 12×8. i.e. 96. 2×20 = 13⅓×3. i.e. 40.

Regula

Regula Aurea Proportionis Compositæ.

Prima Quinque Terminorum.

Datis quinque terminis, reddere sextum: Tres priores sunt Termini Hypotheseos, Posteriores, Quæstionis.

Reg. 1. Rite potes data quinque in trina reducere membra; Si quartum involvat quintus, primumque secundus.

Exem. 7 equi, diebus 12, devorant modios 20; 14 equi, diebus 15, quot modios?

equi. dieb. mod. equi. dieb.
7 : 12 : 20 :: 14 : 15. q^r. 6^tus.
7 × 12 14 × 15 Examen.
84 : 20 :: 210 : 50; 6^tus. 84×50=20×215. i.e. 4200.

Reg. 2. Bina, potest quinis problema resolvere, praxis.

Terminorum quinque dispositio.

Tres tribus Analogi, quæsito tertius est par:
Primus stat princeps, serviles ambo sequuntur.
Pone extrema trium, hinc :: primum, illinc : erue quartum.
Hinc, medium : & quartum :: medium, illinc : erue sextum.
7:12:20::14:15. q^r. 6^tus. 7:20::14:40. 12:40::15:50; 6^tus.

Examen.

Compositæ examen duplex; uti simplicis unum est.
7×40=20×14. i.e. 280. 12×50=40×15. i.e. 600.

Regula quinque Terminorum inversa.

Reg. Quando datum poscit praxin Problema Reversam; Forma duplex adhibenda: Prior Proportio retro Exigitur; dat posterior recto ordine sextum.

Exem. 12 messores demetunt 20 jugera, diebus 9; 30 messores, jugera 45, quot diebus?

mes. jug. di. mes. jug.
12:20:9::30:45. q^r. 6^tus. Revers. 12:9::30:3$\frac{3}{5}$ Dir. 20:3$\frac{3}{5}$::45:8$\frac{1}{10}$
30)12×9(3$\frac{3}{5}$ 20)3$\frac{3}{5}$×45(8$\frac{1}{10}$

Si numerum Hypothesis, quem quæstio, ponit eundum; Comparibus, per tres praxis præstatur, omissis.

mes. jug. di. mes. jug.
40:12:20::40:18 q^r. 6^tus. 12:20::18:30. *sicut* 40×12:20::40×18:30.

Regula

Secunda Quotlibet Terminorum.

Duplex est.

Reg. 12. Societatis.

Artibus ut servit; sic mercibus Aurea Praxis:
Cælitùs Astrææ missum velut instrumentum,
Analogâ trutinat sua cuique peculia lance.

Dispositio Terminorum.

Partium homas: commune lucrum :: pars singula: partem Æquat. Par ratio, si pars cum tempore juncta est.

1. Exem. Tres contulerunt sua symbola; primus, 500 lib.; secundus, 300; tertius, 180; Homas 980. Lucrum vel damnum, 400. Qr. pars singulorum.

500 : 204 5/49
980 : 400 :: 300 : 122 22/49
180 : 73 17/49
980 : 400.

Examen.

Adde simul partes; summa utraque par fit utrinque.

2. Exem. Tres lucrati sunt 1000l. Primus posuit 300l. per 10 menses = 3000. Secundus, 700 per menses 2½ = 1800. Tertius, 800 per mensem 1½ = 1200. Trium homas 6000.

3000 : 500.
6000 : 1000 :: 1800 : 300.
1200 : 200.
6000 : 1000.

3. Exem. Triplex fistula est cisternæ. Prima aquam universam emittit duabus horis; secunda, tribus; tertia, sex. Postulatur, quoto tempore tres simul evacuant cisternam? Loco cisternæ pone unitatem.

Hor. Cist. Hor. Cist.
2 : ½ }
3 : 1 : : 1 : ⅓ } ½+⅓+⅙=1 Cist.
6 : ⅙ }

2° Re-

Reg. 2ª. Alligationis

Merces diversi pretii in pretium alligat unum.

Regula duplex.

Hac pretium commune; quotas docet *altera* partes.

Datis mercium summâ & pretio, dicere medium sive commune pretium unius mensuræ; viz. ulnæ, libræ, modii, &c.

Reg. 1. Venali summâ, summæ partire valorem.

Exem. Proponuntur pannorum trium ulnæ 80. Pretium generale, 480 solidi. Quæritur pretium commune.

80)480(6 sol.

Examen.

Summa sibi ut summam; pars æquat sic sibi partem.

uln. sol. uln. sol.

80 : 480 :: 1 : 6.

Datis pretio medio & proprio mercium singularum, dicere portionem singularum.

Methodus praxeos.

Ad lævam, *medium*: ad dextram stant *propria*, juxtà.

Alternum proprii à medio *discrimen* adapta,

Ad pretium, usque minus discrimen dirige, majus;

Et contrà: summam discrimina collige in unam.

Reg. 2. Totum ut Discrimen, Totum ad venale refertur; Singula sic propriam sua dant discrimina partem.

Exem. Proponitur triplex genus panni. Pretium generale 480. Ulnæ 80. Ulna Rubri, 6. Viridis, 4. Nigri, 10. Commune pretium omnium 6. Quæritur, quota pars singularum trium.

Pretium commune.	Propria.		Portiones.
6	4	4	4:32. viridis.
6	4	4	10:80=4:32. rubri panni,
10	2	0.2	2:16. nigri.
	10		10:80.

Examen.

Ut totum, toti; partes sic partibus æquæ.

Cognitis

Cognitis ſingularum mercium portionibus, dicere pretium ſive valorem ſingularum.

Reg. Ut monas ad medium, ad proprium pars quæq; valorem.

	Port.	Pret.
	32 :	192. viridis.
1 : 6 ::	32 :	192. rubri.
	16 :	96. nigri.
	80 :	480.

Rite licet, ſalvâ praxi, variare ligamen:
Aut unum cuivis, aut plura ligare; ſed uni.
Summa licèt fuerit cum nexu diſpare diſpar,
Non tamen hæc veram lædit variatio praxin:
Praxis enim a propriæ vario diſcrimine partis,
Non à totalis regitur diſcrimine ſummæ.

			Port.		Pret.
6	6) 2.		2:20:		20:120 v. pan.
	4) c. 4.	8:80 ::	4:40:	1:6::	40:240 r. pan.
	10) 2.		2:20.		20:120 n. pan.
	8.		8:80.		80:480.

Exem. Proponitur maſſa ſex Aromatum. Menſura 300 lib. Pretium generale 1500. 300) 1500 (5. Medium ſive commune pretium. Proprium; una libra Amygdali, 1. Zingiberis, 2. Piperis, 3. Caryophylli, 6. Nucis myriſticæ, 8. Croci, 10.

Qr. Portio ſingulorum. Qr. Pretium ſingulorum.

				Port.		Pret.
Amygd.	1	5		5: $83\frac{1}{3}$		$83\frac{1}{3}$: $416\frac{2}{3}$
Zingib.	2	1		1: $16\frac{2}{3}$		$16\frac{2}{3}$: $83\frac{1}{3}$
Pip.	3	3	18:300::	3: 50.	1:5::	50: 250
Caryoph.	6	3		3: 50.		50: 250
Nuc. Myr.	8	2		2: $33\frac{1}{3}$		$33\frac{1}{3}$: $166\frac{2}{3}$
Croc.	10	4		4: $66\frac{2}{3}$		$66\frac{2}{3}$: $333\frac{1}{3}$
		18		18:300.		300:1500.

5	2	1	1	3	1	5
	2	3	2	5	2	3
	3	5	3	1	3	1
	6	4	6	2	6	2
	8	3	8	4	8	3
	10	2	10	3	10	4
		18		18		18

		Port.	Pret.
1	5.3.1.9	9:64 $\frac{32}{43}$	64 $\frac{32}{43}$: 321 $\frac{16}{43}$
2	5.3.1.8	8:57 $\frac{6}{43}$	57 $\frac{6}{43}$: 285 $\frac{30}{43}$
3	5.3.1.5	5:35 $\frac{30}{43}$	35 $\frac{30}{43}$: 178 $\frac{32}{43}$
5	4.....4	42:300:: 4:28 $\frac{24}{43}$	1:5:: 28 $\frac{24}{43}$: 142 $\frac{26}{43}$
6	4.3.....7	7:50	50 : 250
8	4.3.2.9	9:64 $\frac{32}{43}$	64 $\frac{32}{43}$: 321 $\frac{16}{43}$
10	42	42:300	300:1500.

		Port.	Pret.
1	5.3.....8	8:55 $\frac{21}{43}$	55 $\frac{21}{43}$: 279 $\frac{1}{43}$
2	5.1.....6	6:41 $\frac{27}{43}$	41 $\frac{27}{43}$: 209 $\frac{13}{43}$
3	5.3.1.9	9:62 $\frac{34}{43}$	62 $\frac{34}{43}$: 313 $\frac{11}{43}$
4	3.2.....5	43:300:: 5:34 $\frac{18}{43}$	1:5:: 34 $\frac{18}{43}$: 174 $\frac{18}{43}$
8	4.2.....6	6:41 $\frac{27}{43}$	41 $\frac{27}{43}$: 209 $\frac{13}{43}$
10	4.3.2.9	9:62 $\frac{34}{43}$	62 $\frac{34}{43}$: 313 $\frac{11}{43}$
	43	43:300	300:1500.

Regula

Regula Hypotheseos,

Sive (quam vocant) Falsi.

Aurea ab *obscuro* profert Zetemate *clarum*
Dogma; sed e *falsis Hypothetica* Regula *verum*.

Hypothesis vel est Simplex vel Duplex.

Simplex Hypothesis faciles dissolvere nodos;
Scit *Duplex* cæco intextos evolvere gripho.

Simplex Hypothesis.

Ad totum sua membra reducit Hypothesis una.
Reg. Inventum : Thesis :: Hypothesis : Problema solutum.

Exem. Quæritur Numerus, cujus partes $\frac{1}{2}\frac{1}{3}\frac{1}{4}\frac{1}{5}\frac{1}{6}$ efficiunt 522.
Hyp. N. esto 60, cujus $\frac{1}{2}$ 30. + $\frac{1}{3}$ 20. + $\frac{1}{4}$ 15. + $\frac{1}{5}$ 12. + $\frac{1}{6}$ 10. = 87.
87 : 522 :: 60 : 360 N.Q. Nam 60 : 87 :: 360 : 522. vid. p. 246.
N. 360. $\frac{1}{2}$ 180. + $\frac{1}{3}$ 120. + $\frac{1}{4}$ 90. + $\frac{1}{5}$ 72. + $\frac{1}{6}$ 60. = 522.

Duplex Hypothesis; ea rursus est duplex.

1a. Alter in alternam ducendus Hypothesin error:
Factum *aufert* facto signum *par*; *copulat*, *impar*;
Errorem, errori: *partitur* Hypothesin error.

2a. Diaphora, aut summa errorum: sic fertur ad unum :: ut
Diaphora Hypothesûm : ad Numerum, qui corrigit unam.

Regula demonstrat bene praxin postera primæ.

1. Exem. 100lib. inter A. B. C. B triplum ad A; C = A + B. Qr. A.

Hyp. 1a. A 12. + B 36. + C 48 = 96. 1us. Error − 4.
2a. A 13. + B 39. + C 52 = 104. 2us. Error + 4.

48 + 52 = 100

Reg. 1a. Hyp. 12 13 — ($12\frac{1}{2}$ N.Q.
Err. 4 + 4 = 8

A $12\frac{1}{2}$ + B $37\frac{1}{2}$ + C 50 = 100 N. Datus.

Simplicis, Hypothesis *duplex*, ænigmata solvit.

96 : 100 :: 12 : $12\frac{1}{2}$.

Reg. 2da. sive Exam. Hyp. 1a. A 12. 2a. A 13. Dria. 1.
Error 1us. − 4; Error 2us. + 4. Summa 8.
8 : 4 :: 1 : + $\frac{1}{2}$. 8 : 4 :: 1 : − $\frac{1}{2}$. A. 12 + $\frac{1}{2}$. vel A. 13 − $\frac{1}{2}$ = $12\frac{1}{2}$.

Exem.

2. Exem. Quæruntur duo numeri, quorum utrique si addantur 16, ille erit quadruplus, hic triplus, ad alterum.

Hyp. 1ª. A4+16=20 4lum adB. ergo B5. sed B5+16 non est 3lum ad A4. err. +9.
2ª. A8+16=24 4lum adB. ergo B6. sed B6+16 non est 3lum ad A8. err. -2.

8 + 72 = 80
Hyp. 4 8 — 7 $\frac{3}{11}$ N. Q.
Err. 9 + 2 = 11

A7 $\frac{3}{11}$+16=23 $\frac{3}{11}$=20 $\frac{36}{11}$ 4lum adB5 $\frac{9}{11}$. B5 $\frac{9}{11}$+16=21 $\frac{9}{11}$ 3lum adA7 $\frac{3}{11}$.

Exam. Summa errorum 11. Dria Hypotheseon 4. Primus error 9.

11 : 9 :: 4 : 3 $\frac{3}{11}$ A4+3 $\frac{3}{11}$=7 $\frac{3}{11}$ N. Q.

3. Exem. Qr numerus, qui cum partibus suis $\frac{1}{2}$+$\frac{1}{3}$+$\frac{1}{4}$+1=100.

1ª. 12. $\frac{1}{2}$ 6.+$\frac{1}{3}$4.+$\frac{1}{4}$3.+1=26. err. -74. 588 de 776=1188
Hyp. Hyp. 12 24 — 47 $\frac{13}{25}$ N. Q.
2ª. 24. $\frac{1}{2}$ 12.+$\frac{1}{3}$8.+$\frac{1}{4}$6.+1=51. err. -49. Err. 74 — 49 = 25

N. 47 $\frac{13}{25}$.

$\frac{1}{2}$...23 $\frac{19}{25}$. Nam 47 $\frac{13}{25}$=46 $\frac{38}{25}$. 2)46(23. $\frac{1}{2}$. $\frac{38}{25}$=$\frac{38}{50}$ per 2=$\frac{19}{25}$.
$\frac{1}{3}$...15 $\frac{21}{25}$. Nam 47 $\frac{13}{25}$=45 $\frac{63}{25}$. 3)45(15. $\frac{1}{3}$. $\frac{63}{25}$=$\frac{63}{75}$ per 3=$\frac{21}{25}$.
$\frac{1}{4}$...11 $\frac{22}{25}$. Nam 47 $\frac{13}{25}$=44 $\frac{88}{25}$. 4)44(22. $\frac{1}{4}$. $\frac{88}{25}$=$\frac{88}{100}$ per 4=$\frac{22}{25}$.

99+1=100. *v. de pag.* 223. *p.* 224.

Exam. Dria Hypotheseon, 12. Dria Errorum, 25. Primus error 74.

25 : 74 :: 12 : 35 $\frac{13}{25}$ 12+35 $\frac{13}{25}$=47 $\frac{13}{25}$ N. Q.

4. Exem. *Quæritur portio argenti in coronâ aureâ Hieronis regis Syracusani per Archimedem detecta.* Vitruv. lib. 9. c. 3.

1ª. *Massa auri*; 2ª. *argenti*; 3ª. *corona, æquo pondere in vas aquæ plenum demissa, mensuram effusæ aquæ, pariter & fraudem mistionis exposuit. Praxis verò & portio a Vitruvio non describitur. Methodus itaque detegendæ fraudis per Hypotheseos Regulam ab Arithmeticæ scriptoribus eruditis ferè omnibus excogitatur. Dic 1º trium singularum pondus fuisse 5 libras. 2º massam auri expulisse 3 libras aquæ; massam argenti, 4 $\frac{1}{2}$; coronam, 3 $\frac{1}{4}$.*

Hyp. 1. 3 lib. auri; 5 aur. : 3 aq. :: 3 aur. : 1 $\frac{4}{5}$ aq.
2 lib. arg. 5 arg. : 4 $\frac{1}{2}$ aq. :: 2 arg. : 1 $\frac{4}{5}$ aq. } ὁμοῦ 3 $\frac{3}{5}$. Err. +$\frac{7}{20}$

Hyp. 2. 2 lib. auri; 5 aur. : 3 aq. :: 2 aur. : 1 $\frac{1}{5}$ aq.
3 lib. arg. 5 arg. : 4 $\frac{1}{2}$ aq. :: 3 arg. : 2 $\frac{7}{10}$ aq. } ὁμοῦ 3 $\frac{9}{10}$. Err. +$\frac{13}{20}$

$\frac{19}{20}$ — $\frac{14}{20}$ = $\frac{27}{20}$
Hyp. 3 2 — 4 $\frac{1}{6}$ aur. ergo 5 arg. tantùm.
Err. $\frac{7}{20}$ de $\frac{13}{20}$ = $\frac{9}{20}$

Dria Hypotheseon 1. Dria errorum $\frac{6}{20}$

1. Exam. $\frac{6}{20}$: $\frac{7}{20}$ :: 1 : 1 $\frac{1}{6}$. 3 auri + 1 $\frac{1}{6}$=4 $\frac{1}{6}$ Auri.

2. Exam. 5 auri : 3 aq. :: 4 $\frac{1}{6}$ auri : 2 $\frac{1}{2}$ aq.
5 arg. : 4 $\frac{1}{2}$ aq. :: 5 arg. : $\frac{3}{4}$ aq. } ὁμοῦ 3 $\frac{1}{4}$. mensura coronæ,

Pergit

PErgit in egregiam Numeros addicere praxin
Sub titulis Geometra ſuis; Arteſque per omnes
Utitur, ut meliore Apodixeos indice fidæ.
Tanta quidem Numero eſt vis, ut ſit dicta *Poteſtas.*

Geneſis ſive Involutio Poteſtatum.

Quilibet eſt Numerus *Radix*; replicata, *Quadratus*
Fit Numerus; replicata iterum, fit *Cubus*; & omnem,
Quæ præit, implicitans fit quæque ſecuta Poteſtas.

Tabula Poteſtatum.

vide p. 243.

0 N	1 R	2 Q	3 C	4 QQ	5 SS	6 QC
1	1	1	1	1	1	1
1	2	4	8	16	32	64
1	3	9	27	81	243	729
1	4	16	64	256	1024	4096
1	5	25	125	625	3125	15625
1	6	36	216	1296	7776	46656
1	7	49	343	2401	16807	117649
1	8	64	512	4096	32768	262144
1	9	81	729	6561	59049	531441
1	10	100	1000	10000	100000	1000000
1	11	121	1331	14641	161051	1771561
1	12	144	1728	20736	248832	2985984
1	13	169	2197	28561	371293	4826809
1	14	196	2744	38416	537824	7529536
1	15	225	3375	50625	759375	11390625
1	16	256	4096	65536	1048576	16777216
1	17	289	4913	83521	1419857	24137569
1	18	324	5832	104976	1889568	34012224
1	19	361	6859	130321	2476099	47045881
1	20	400	8000	160000	3200000	64000000

Radix binomia eſt, geminas complexa figuras;
Trinomia eſt, ſi tres unà coiere figuræ.

Alia Geneſis Poteſtatis Q. & C.

Q. Impariles cum Quadratis diſpone figuras; Quadratumque ſuprà poſitum conjunge ſequenti Imparili; facis & Quadratum ex ordine quovis.

C. A Monade exorſus; numerus ſi ponitur impar Lævo deſcenſu toties, quot Cubica Radix Includit Monades; facis omni ex ordine Cubum.

Impar.	Q.	R	Ordo Imparium.									C	R
1	1	1									1	1	1
3	4	2								3	5	8	2
5	9	3						7	9	11		27	3
7	16	4					13	15	17	19		64	4
9	25	5				21	23	25	27	29		125	5
11	36	6			31	33	35	37	39	41		216	6
13	49	7		43	45	47	49	51	53	55		343	7
15	64	8	57	59	61	63	65	67	69	71		512	8
17	81	9	73	75	77	79	81	83	85	87	89	729	9
19	100	10	91	93	95	97	99	101	103	105	107	109	1000	10

Intervallum duarum Poteſtatum.

Cum binâ Radice Monas, ſimul aucta Quadrato, Gignit vicinum: Radix tripla, tresque Quadratæ Radices, Monas, & Cubus, ſimili ordine Cubum.

2R + Un.	+ Q =	Q	R	3R + 3Q	R + Un.	+ C =	C	R
. .	.	1	1	. .	.	.	1	1
2 + 1	+ 1 =	4	2	3 + 3	+ 1	+ 1 =	8	2
4 + 1	+ 4 =	9	3	6 + 12	+ 1	+ 8 =	27	3
6 + 1	+ 9 =	16	4	9 + 27	+ 1	+ 27 =	64	4
8 + 1	+ 16 =	25	5	12 + 48	+ 1	+ 64 =	125	5
10 + 1	+ 25 =	36	6	15 + 75	+ 1	+ 125 =	216	6
12 + 1	+ 36 =	49	7	18 + 108	+ 1	+ 216 =	343	7
14 + 1	+ 49 =	64	8	21 + 147	+ 1	+ 343 =	512	8
16 + 1	+ 64 =	81	9	24 + 192	+ 1	+ 512 =	729	9
18 + 1	+ 81 =	100	10	27 + 243	+ 1	+ 729 =	1000	10

Geneſis

Geneſis Differentiarum & Cuborum ex numeris pari & impari.

Ad lævam, à *ſexto* Progreſſio dupla deorſum
Fit numero: Monas ad dextram contermina ſexto eſt:
Junctæ ambæ ſubter monadem *diſcrimina* ponunt
Cuborum: Collecta etiam diſcrimina præbent
Cuncta ſimul vicinum in poſtremo ordine *cubum*.

Quatuor, explanat praxin Diagramma, columnis; Hectada, Diſcrimen, Cubum, Latus; ordine dextro.

Senaria Progreſſio.	Differentiæ Cuborum.	Cubi	Radices.
6	1	1	1
12	7	8	2
18	19	27	3
24	37	64	4
30	61	125	5
36	91	216	6
42	127	343	7
48	169	512	8
54	217	729	9
60	271	1000	10

Integratio ſive Configuratio Poteſtatum Q & C.

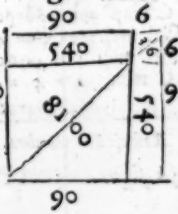
1°. Q. Radix ſi ſit *Binomia*, in ſua divide membra; Singula trude in ſe; in ſocia, utraque trude viciſſim: Bina Quadrata & erunt, media & Rectangula bina.

Radix Binomia *96*.

Geneſis Numeralis.

Q. maj. $90\times90=8100$
2 Rect. $\left\{\begin{array}{l}90\times6=540\\6\times90=540\end{array}\right.$
Q. min. $6\times6=36$
$96\times96=9216$

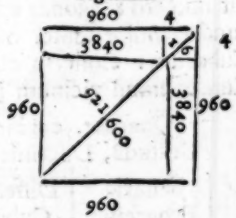
Figuralis.



Pluri-figurata eſt ſi Radix; prima duplatur Binomia; ingeriturque novum latus; idque quadratur.

Radix trinomia 964.

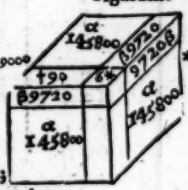
	Geneſis Numeralis.	Figuralis.
Q. maj.	900×900 = 810000	
2 Rect.	900× 60 = 54000	
	60×900 = 54000	
Q. min.	60× 60 = 3600	
Q. maj.	960×960 = 921600	
2 Rect.	960× 4 = 3840	
	4 ×960 = 3840	
Q. min.	4 × 4 = 16	
	964×964 = 929296	



2°. C. Cubum progenerat-Trias, ut Duas antè Quadratum. Membra in ſe triplica; in ſocium, ter trude Quadrata: Sex ſunt cum binis Parallelepipeda Cubis.

Radix binomia 96.

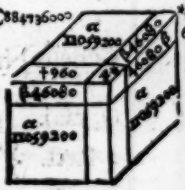
	Geneſis Numeralis.	Figuralis.
C maj.	90×90×90 = 729000	
3 Parallel. maj.	90×90× 6×3 = 145800	†C729000
3 Parallel. maj.	6× 6×90×3 = 9720	
C min.	6× 6× 6 = 216	
	96×96×96 = 884736	



Pluri-figuratæ Radicis *Dupla* tripletur; In Duplamq; quadratam ter ſe *Tertia* trudat: Terq; quadrata plicet ſe in Duplam, & cubica fiat.

Radix trinomia 964.

	Geneſis Numeralis.	Figuralis.
* C maj.	900×900×900 = 729000000	
3 Parallel. maj.	900×900×60 × 3 = 145800000	†C884736000
3 Parallel. min.	60×60×900 × 3 = 9720000	
C min.	60× 60× 60 = 216000	
C maj.	960×960×960 = 884736000	
3 Parallel. maj.	960×960× 4 × 3 = 11059200	
3 Parallel. min.	4 × 4×960 × 3 = 46080	
C min.	4 × 4 × 4 = 64	
	964×964×964 = 895841344	



† * *Radicis duo membra.* α 3 *Parallel. maj.* β 3 *Parallel. min.*

Viſa figura docet Partes; *inviſa*que Cubos.

Index per Duadem Triademve exhauſta, Quadratos
Altera Tyroni numeros dabit, altera Cubos.
Fine Poteſtatum numeros ſuus ordo reponit.
Surſolidos finit denâ ordo Cyclade puros.

Nulla duas, trias, heptas; nulla etiam ogdoas, impar
Ciphra nec ulla, Quadratæ eſt unquam in fine figuræ.
Sola monas, tetras, pemptas, ſimul enneas, hectas,
Vel par Ciphra: Nec uſque monas, tetraſve, nec uſque
Enneas; his niſi par numerus, vel prævia ciphra eſt.
Pemptados eſt duas; Hectados eſt numerus comes impar.

Nullus erit cubus; tetras quando ultima, quando &
Ogdoas, & nec par numerus nec ciphra cohæret.
Nullus; ſi poſt pemptada nec duas uſque, nec heptas:
Poſt duadem haud aliter, numerus ſi non venit impar:
Ultima denique ſi dupla ciphra vel unica: Nullus.

Porrò Poteſtatum, per cramben, carmine nullo
Exprimitur Geneſis; per Analyſin ampla docetur.
Quàm *Verbis*, Numeri plùs *Fabrica* clara *Figuris*.

Geneſis Biquadratæ Poteſtatis.

Radix 964.

Q Q maj.	90×90×90×90 =	65610000
4 C × R	90×90×90×4×6 =	17496000
6 Q × Q	90×90×6×6×6 =	1749600
4 R × C	90×4×6×6×6 =	77760
Q Q min.	6×6×6×6 =	1296
Q Q maj.	960×960×960×960 =	8493465600000
4 C × R	960×960×960×4×4 =	14155776000
6 Q × Q	960×960×6×4×4 =	88473600
4 R × C	960×4×4×4×4 =	245760
Q Q min.	4×4×4×4 =	256
	964×964×964×964 =	863591055616

Geneſis Surſolidæ Poteſtatis.

Radix 964.

SS maj.	90 × 90 × 90 × 90 × 90 =	5904900000
5 QQ × R	90 × 90 × 90 × 90 × 5 × 6 =	1968300000
10 C × Q	90 × 90 × 90 × 10 × 6 × 6 =	262440000
10 Q × C	90 × 90 × 10 × 6 × 6 × 6 =	17496000
5 R × QQ	90 × 5 × 6 × 6 × 6 × 6 =	583200
SS min.	6 × 6 × 6 × 6 × 6 × 6 =	7776
SS maj.	960 × 960 × 960 × 960 × 960 =	815372697600000
5 QQ × C	960 × 960 × 960 × 960 × 5 × 4 =	1698693120000
10 C × R	960 × 960 × 960 × 10 × 4 × 4 =	141557760000
10 Q × Q	960 × 960 × 10 × 4 × 4 × 4 =	589824000
5 R × QQ	960 × 5 × 4 × 4 × 4 × 4 =	1228800
SS min.	4 × 4 × 4 × 4 × 4 × 4 =	1024
	964 × 964 × 964 × 964 × 964 × 964 =	832501777613824

Geneſis BSurſolidæ Poteſtatis.

Radix 964.

BSS maj.	90 × 90 × 90 × 90 × 90 × 90 × 90 =	478296900000000
7 QC × R	90 × 90 × 90 × 90 × 90 × 90 × 7 × 6 =	223205220000000
21 SS × Q	90 × 90 × 90 × 90 × 90 × 21 × 6 × 6 =	44641044000000
35 QQ × C	90 × 90 × 90 × 90 × 35 × 6 × 6 × 6 =	4960116000000
35 C × QQ	90 × 90 × 90 × 35 × 6 × 6 × 6 × 6 =	330674400000
21 Q × SS	90 × 90 × 21 × 6 × 6 × 6 × 6 × 6 =	13226976000
7 R × QC	90 × 7 × 6 × 6 × 6 × 6 × 6 × 6 =	293932800
BSS min.	6 × 6 × 6 × 6 × 6 × 6 × 6 =	2799360
BSS maj.	960 × 960 × 960 × 960 × 960 × 960 × 960 =	751447478108160000000
7 QC × R	960 × 960 × 960 × 960 × 960 × 960 × 7 × 4 =	2191721811148800000000
21 SS × Q	960 × 960 × 960 × 960 × 960 × 21 × 4 × 4 =	273965226393600000000
35 QQ × C	960 × 960 × 960 × 960 × 35 × 4 × 4 × 4 =	19025362944000000
35 C × QQ	960 × 960 × 960 × 35 × 4 × 4 × 4 × 4 =	792723456000000
21 Q × SS	960 × 960 × 21 × 4 × 4 × 4 × 4 × 4 =	19818086400
7 R × QC	960 × 7 × 4 × 4 × 4 × 4 × 4 × 4 =	27525120
BSS min.	4 × 4 × 4 × 4 × 4 × 4 × 4 × 4 =	16384
	964 × 964 × 964 × 964 × 964 × 964 × 964 =	773640571929416187904

Punctatio Membrorum in Poteſtatum Evolutione.

Puncta, Poteſtatum Numerus, *ſignalia* ſubdit
A dextrâ ad lævam, ſub primis prima figuris,
Pro ratione *Poteſtatum*; *bina*, ordine bino;
Trina, etiam trino; uſque ordo *idem*, *eademque* Poteſtas.
Cuilibet interſunt loca deficientia puncto.
Quæ latet à puncto lævo, ſit adempta Poteſtas:
At latus uſque plicatum ad dextera puncta locetur.

Analyſis ſive Evolutio Poteſtatum.

Praxis, quæ priùs intruſit, bene membra reſolvit.

Evolutio Poteſtatis Quadratæ.

Tolle Quadratum; pone duplum Latus; extrahe duplum
Intruſum Lateri invento, Latus idque Quadratum.
Si praxi numerus ſupereſt; Quotiente duplato,
Fac, quod feciſti. Si non; Numerale ſuperſtat:
Cui duplum Latus adjicitur ſubjectile Nomen;
Succedentis ab hôc diſtantia vera Quadrati. *vide pag. 281.*

	Q	R		Q	R
	9216	(96		929296	(964
Ablat.	81	(9		81	(9
Reſid.	1116			1192	
Diviſor	18	(6		18	(6
2 Rect.	108			108	
Q	36			36	
Ablat.	1116			1116	
Reſid.	0			7696	(96
			Diviſor	192	(4
			2 Rect.	768	
			Q	16	
			Ablat.	7696	
				0	

Evolutio Poteſtatis Cubicæ.

Cubum deme; latus fac Triplum; terque Quadratum,
Unde Quotus; numeros qui ſit ducendus in ambos.
Trinum Quadratum ſimplex Quotus; iſque Quadratus
Multiplicat Triplum latus; is ſit denique Cubus:
Radix eruitur. Numerus praxi uſque futuræ
Si ſupereſt; itera. Si non; Numerale relictum eſt;
Radix cui tripla, Radix tripliciterque Quadrata,
Nomen erit: Cubi intervallum exinde ſecuti. vide p. 281.

	C	R		C	R
	884736	(96	895841344		(964
Ablat.	729	(9	729		(9
Reſid.	155736		166841		
Tripl.	27		27		
Diviſor	243	(6	243		(6
3 Paral.	1458		1458		
3 Paral.	972		972		
C.	216		216		
Ablat.	155736		155736		
Reſid.	0		11105344		(96
		Tripl.	288		
		Diviſor	27648		(4
		3 Paral.	110592		
		3 Paral.	4608		
		C.	64		
		Ablat.	11105344		
			0		

Analyſis

Analyſis propria Poteſtatis Biquadratæ.

Tolle Biquadratum; Lateris quater accipe Cubum:
Bis ter Quadratum; bisque bis adde Latus.
Summa novum præbet Latus: illius, ordine verſo,
Tres ſimiles primis implicita numeris.
Adde Biquadratum: reliquas proba Summa Figuras
Subtrahit. Infectum fractio claudit opus.

	QQ	R		QQ	R
	84934656	(96		86359105616	(964
Ablat.	65610	(9		65610	(9
Reſid.	19324656			20749105	
4C	2916			2916	
6Q	486			486	
4R	36			36	
Diviſor	296496	(6		296496	(6
4C×R	17496			17496	
6Q×Q	17496			17496	
4R×C	7776			7776	
QQ	1296			1296	
Ablat.	19324656			19324656	
Reſid.	0			1424449616	(96
			4C	3538944	
			6Q	55296	
			4R	384	
			Diviſor	3544744	(4
			4C×R	14155776	
			6Q×Q	884736	
			4R×C	24576	
			QQ	256	
			Ablat.	1424449616	
				0	

Analyſis

Analyſis Poteſtatis Surſolidæ.

Auſer Surſolidum : Lateriſque Quadrato-Quadrata
Quinque ſuo, & Cubos quinque bis adde, loco ;
Denos indè Quadratos ; & Latus adjice quinum ;
Quære quotum ; Lateri junge Latuſque novum.
Ordine retrogrado ſemel, & bis, terque, quaterque,
Id Latus in ſimiles multiplica numeros ;
Surſolidam Lateris poſtremi adjunge Figuram :
Summam deme. Manens Ciphra peregit opus.

	SS	R		SS	R
	82537269760	(96	832501777613824	(964
Ablat.	59049	(9	59049	(9
Reſid.	2248826976		2420117776	
5 QQ	32805		32805	
10 C	7290		7290	
10 Q	810		810	
5 R	450		450	
Diviſor	335421450	(6	335421450	(6
5 QQ × R	196830		196830	
10 C × Q	262440		262440	
10 Q × C	174960		174960	
5 R × QQ	58320		58320	
SS	7776		7776	
Ablat.	2248826976		2248826976	
Reſid.	0		171290800013824	(96
		5 QQ	424673280	
		10 C	8847360	
		10 Q	92160	
		5 R	480	
		Diviſor	425558938080	(4
		5 QQ × R	1698693120	
		10 C × Q	141557760	
		10 Q × C	5898240	
		5 R × QQ	122880	
		SS	1024	
		Ablat.	171290800013824	
			0	

Forma alia Praxeos.

Poſtquam Surſolida exemplo eſt detracta Poteſtas;
Scribe Quoti numeros, docet ut Paradigma, quaternos.
Primos trude duos, pro Diviſore, repertos.
Inverſum reſcribe Quoti Diagramma ſecundi,
Bisque duos plica, ut ante, novâ à radice creatos,
In numeros peperit quos radix prima plicatos:
Surſolidam Laterisque ſecundi adjunge Figuram.
Summa trium par reſiduo eſt, ſi ſit proba praxis.

SS	R
8253726976	(96
Ab. 59049	(9
Ref. 2248826976	
Div. 3280500000	(6
Ab. 2248826976	
0	

R9 R6

QQ	6561x50000x	6R	=	1968300000	
C	729x10000x	36Q	=	262440000	
Q	81x 1000x	216C	=	17496000	
R	9x 50x	1296QQ	=	583200	
		SS	=	7776	
				2248826976	

.... 6561x50000 = 328050000

SS	R
832501777613824	(964
Ab. 59049	(9
Ref. 24201177776	
Div. 3280500000	(6.
Ab. 2248826976	
Ref. 171290800013824	(96
Div. 42467328000000	(4
Ab. 171290800013824	
0	

R9 R6

QQ	6561x50000x	6R	=	1968300000	
C	729x10000x	36Q	=	262440000	
Q	81x 1000x	216C	=	17496000	
R	9x 50x	1296QQ	=	583200	
		SS	=	7776	
				2248826976	

..6561x50000 = 328050000

R96 R4

QQ	84934656x10000x	4R	=	1698693120000	
C	884736x1000x	36Q	=	141557760000	
Q	9216x 100x	64C	=	5898240000	
R	96x 50x	256QQ	=	1228800	
		SS	=	1024	
				171290800013824	

..84934656x50000 = 42467328000000

Litera ſi puros præit Alphabetica, mandat
Surſolidos, tantùm propriâ uſque evolvere praxi.

Analyſis

Analyſis BSurſolidæ Poteſtatis.

Septem, *A *ſexta* ſuos; ter ſeptem *quinta* poteſtas;
Quinſeptem *quarta* & *tertia* dat numeros.
Bina & *quinta* pares, ac *prima* & *ſexta* miniſtrant;
Has *A multiplicat: †B vice retrogradâ; *Rad.ma.†Rad.mi.
Collectis BSurſolidam adjice: detrahe ſummam;
Si nil ſit reliquum, calculus egit opus.

	BSS	R	BSS	R
	751447478108 16	(96	773640571929416187904	(964
Ablat.	4782969	(9	4782969	(9
Reſid.	2731505781081 6	A	2953436719294 1	A
7 QC	3720087		3720087	
21 SS	1240029		1240029	
35 QQ	229635		229635	
55 C	25515		25515	
21 Q	1701		1701	
7 R	63		63	
Diviſor	4846411935 73	(6	4846411935 73	(6
7 QCxR	22320522	B	22320522	B
21SSxQ	44641044		44641044	
35QQxC	49601160		49601160	
35CxQQ	33067440		33067440	
21 QxSS	13226976		13226976	
7 RxQC	2939328		2939328	
BSS	279936		279936	
Ablat.	2731505781081 6		2731505781081 6	
Reſid.	0		2219309382125618 7904	(96
				A
		7 QC	5479304527872	
		21 SS	171228266496	
		35 QQ	2727712960	
		35 C	30965760	
		21 Q	193536	
		7 R	672	
		Diviſor	5496457112636320 32	(4
		7 QCxR	2191721811148 8	B
		21SSxQ	2739652263936	
		35QQxC	190253629440	
		35CxQQ	7927234560	
		21 QxSS	198180864	
		7 RxQC	2752512	
		BSS	16384	
		Ablat.	2219309382125618 7904	
			0	

Generalis Evolutio Poteſtatis Compoſitæ.

Pro titulo ſua compoſitus vult membra Character Exhaurire; Quadratos, Cubos, Cubo-Quadratos: Surſolidis ità ſi numerus coaleſcat utervis.

4tâ. Pot. QQ. Q 84934656	(Q 9216	(R 96.
6ta. Pot. QC. Q 781757789696	(C 884736	(R 96.
Vel. CQ. C 781757789696	(Q 9216	(R 96.
8va. Pot. QQQ. Q 7213895789838336	(Q 84934656	(Q 9216 (R 96.
9na. Pot. CC. C 692533995804480256	(C 884736	(R 96.
10ma. Pot. QSS. Q 664832635991501045 76	(SS 8153726976	(R 96.
Vel SSQ. SS 664832635991501045 76	(Q 9216	(R 96.
15 Pot. CSS. C 5421086379860909958354552242176	(SS 8153726976	(R 96.
Vel SS C. SS 5421086379860909958354552242176	(C 884736	(R 96.

At numeros, quibus eſt Quadrata aut Cubica Radix, Omnes evolvit Quadrata aut Cubica praxis. *vide pag. 243.*

Par de Surſolidis praxis ferè habenda figuris.

R	Q	C	QQ	SS	QC
Q. 16	Q 256	Q 4096	Q 65536	Q 1048576	Q 16777216
C. 64	C 4096	C 262144	C 16777216	C 1073741824	C 68719476736
SS. 32	SS 1024	SS 32768	SS 1048576	SS 33554432	SS 1073741824

Compendioſior Analyſis Poteſtatum.

Pluribus afficitur ſi punctis aucta Poteſtas; E * tabulâ cape, ſupra puncta priora, figuras. *vide pag. 281, 282, &c.*

	Q.	R
	929296	(964
Ablat.	9216	(96
Reſid.	7696	
Diviſ.	192	(4
2 Rect.	768	
Q.	16	
Ablat.	7696	
	0	

	C	R
	895841344	(964
Ablat.	884736	(96
Reſid.	11105344	
Tripl.	288	
Diviſ.	27648	(4
3 Par.	110592	
3 Par.	4608	
C.	64	
Ablat.	11105344	
	0	

	QQ	R
	863591055616	(964
Ablat.	84934656	(96
Resid.	14244495616	
4 C	3538944	
6 Q	55296	
4 R	384	
Divis.	354447744	(4
4C×R	14155776	
6Q×Q	884736	
4R×C	24576	
QQ	256	
Ablat.	14244495616	
	0	

	SS	R
	832501777613824	(964
Ablat.	8153726976	(96
Resid.	17129080013824	
5 QQ	424673280	
10 C	8847360	
10 Q	92160	
5 R	480	
Divis.	425558938080	(4
5QQ×R	1698693120	
10C×Q	141557760	
10Q×C	5898240	
5R×QQ	122880	
SS	1024	
Ablat.	17129080013824	
	0	

	BSS	R
	773640571929416187904	(964
Ablat.	75144747810816	(96
Resid.	22993093821256187904	
7 QC	5479304527872	
21 SS	171228266496	
35 QQ	2972712960	
35 C	30965760	
21 Q	193536	
7 R	672	
Divisor	549645711263632032	(4
7 QC × R	21917218111488	
21 SS. × Q	2739652263936	
35 QQ × C	190253629440	
35 C × QQ	7927234560	
21 Q × SS	198180864	
7 R × QC	2752512	
BSS.	16384	
Ablat.	22193093821256187904	
	0	

Nulla Potestatum Fractarum extractio ; si non Utraque pars fuerit simili ratione Potestas : Vel poterit ratione Potestas æqua *reduci*.

$Q\frac{4}{9}R\frac{2}{3}$. $C\frac{8}{27}R\frac{2}{3}$. $QQ\frac{16}{81}R\frac{2}{3}$. $SS\frac{32}{243}R\frac{2}{3}$.

Ex minutiis minutiarum *viz.* $\frac{2}{4}$ de $\frac{8}{9}$ conficitur $Q\frac{16}{36}R\frac{4}{6}$.

Reducitur $\frac{20}{45}$ per 5 ad $Q\frac{4}{9}R\frac{2}{3}$. Rursus $1\frac{10}{27}$ ad $C\frac{64}{27}R\frac{4}{3}$.

Non ità $\frac{4}{6}Q$ vel $\frac{6}{9}Q$ neque $\frac{16}{27}\frac{Q}{C}$ Ex-

Examen Praxeôn.

Ducta in se toties, monades quot in Indice, Radix
Si numerum det Dividuum, est proba praxeos index.

R 96x96 = Q 9216. R 96x96x96 = C 884736.
R 96x96x96x96 = QQ 84934656. R 96x96x96x96x96 = SS 8153726976.
R 96 × 96 × 96 × 96 × 96 × 96 × 96 = BSS 751447810816

Enneas usum habet haud indignum; sic habet Hepras.

Q 9216 { -9 = 0. 96-9=6 / 96-9=6 } 6x6=36-9=0
Q 9216 { -7 = 4. 96-7=5 / 96-7=5 } 5x5=25-7=4

Q 9237 { -9 = 3. 96-9=6 / 96-9=6 } 6x6+21=57-9=3
Q 9237 { -7 = 4. 96-7=5 / 96-7=5 } 5x5+21=46-7=4

C 884736 { -9 = 0. 96-9=6 } 6x6x6=216-9=0.
C 884736 { -7 = 6. 96-7=5 } 5x5x5=125-7=6.

C 884759 { -9 = 5. 96-9=6 } 6x6x6+23=239-9=5.
C 884759 { -7 = 1. 96-7=5 } 5x5x5+23=148-7=1.

QQ 84934656 { -9 = 0. 96-9=6 } 6x6x6x6=1296-9=0.
QQ 84934656 { -7 = 2. 96-7=5 } 5x5x5x5= 625-7=2.

SS 8153726976 { -9 = 0. 96-9=6 } 6x6x6x6x6x6=7776-9=5.
SS 8153726976 { -7 = 3. 96-7=5 } 5x5x5x5x5x5=3125-7=3.

BSS 751447810816 { -9 = 0. 96-9=6 } 6x6x6x6x6x6x6=279936-9=0.
BSS 751447810816 { -7 = 5. 96-7=5 } 5x5x5x5x5x5x5= 78125-7=5.

Inventio Denominatoris applicandi ad Numeratorem Radicis Surdæ.

Si supereſt operi Numerus, poſtquam eruta Radix,
Reſiduus, *Numerator* erit; cui **bina Poteſtas*, vide Tab.
Altera poſterior, prior altera proxima; ponit pag. 281,
Inter se medium, vice *Nominis*, *Intervallum*: 282, &c.
Quod *minor* e *majore* docebit adempta Poteſtas,
A numero poſtquam *monas* eſt ſublata relicto.

Q 9237 (R 96 21/192 Interv. Q 9409 - Q 9216 = 193 - 1 = 192.
R 97 R 96.

C 884859 (R 96 123/27936 Interv. C 912673 - C 884736 = 27937 - 1 = 27936.
R 97 R 96.

QQ 84934890 (R 96 234/3594624 Interv. QQ 88129281 - QQ 84934656 = 3594625 - 1 = 3594624.
R 97 R 96.

SS 8153727308 (R 96 $\frac{332}{433613280}$ Interv.

SS 8587340257 - SS 8153726976 = 433613281 - 1 = 433613280.
R 97 R 96

BSS 7514474782161 (R 96 $\frac{1345}{5653536667196}$ Interv.

BSS 80798284478113 - BSS 751447810816 = 5653536667197 - 1 = 5653536667196.
R 97 R 96

Specialis Expositio Denominatoris Quadratici.

Si monas apposita est; minor est, quàm Vera Potestas:
Si non apposita est; major, quàm Vera, redundat.

Q 9237 (R 96 $\frac{21}{192}$ + 1. 96 $\frac{21}{193}$ × 96 $\frac{21}{193}$ = 9236 $\frac{33637}{37249}$ minor Numero 9237 per $\frac{3612}{37249}$.

Q 9237 (R 96 $\frac{21}{192}$ 96 $\frac{21}{192}$ × 96 $\frac{21}{192}$ = 9237 $\frac{441}{36864}$ major Numero 9237 per $\frac{441}{36864}$.

Approximatio Radicis Surdæ ad Veram.

Ut Surdo e Numero sculpatur proxima radix,
Sub finem adde Quadratis ciphras, ordine bino;
Et Cubis, trino; melior, queis praxis abundat.
Pro binis quot habet, trinisve, soluta Potestas;
Singula ciphra hæret monadi, proba Nominis index.
Addita si Numero est Ciphrarum copia Surdo,
Haud vera eruitur; paulò licèt usque propinquet.
Ergo vix operæ est pretium exantlare laborem,
Venantem mutili discrimen sectile grani.

Radices Surdæ.

Q $\frac{|4}{\cancel{29}}$ (5 $\frac{4}{11}$ 290000 (5 $\frac{38}{100}$.
25

$\frac{38}{100}$ paulò major quàm $\frac{4}{11}$. *p.219.l.6.à fine.*

C $\frac{|111}{\cancel{623}}$ (8 $\frac{111}{217}$ 623000000 (8 $\frac{54}{100}$.
522

$\frac{54}{100}$ major quàm $\frac{111}{217}$. *p.219.*

Disparitas monadum est, ferè par analogia binis,

Fractiones $^{a}\frac{111}{217}$ & $^{b}\frac{54}{100}$. Monades sunt $^{a}106$ & $^{b}46$.

Analogia est $\frac{1}{2}$; & plusculum, *viz.* $\frac{1}{20}$ & $\frac{1}{25}$.

Schema Poteſtatum lubet exemplare priorum Præ reliquis dare, commodiùs Tyronis in uſum.

Syllabus trium Poteſtatum R. Q. C.

R	Q	C
1	1	1
2	4	8
3	9	27
4	16	64
5	25	125
6	36	216
7	49	343
8	64	512
9	81	729
10	100	1000
11	121	1331
12	144	1728
13	169	2197
14	196	2744
15	225	3375
16	256	4096
17	289	4913
18	324	5832
19	361	6859
20	400	8000
21	441	9261
22	484	10648
23	529	12167
24	576	13824
25	625	15625
26	676	17576
27	729	19683
28	784	21952
29	841	24389
30	900	27000
31	961	29741
32	1024	32768
33	1089	35937
34	1156	39304
35	1225	42875
36	1296	46656
37	1369	50653
38	1444	54872
39	1521	59319
40	1600	64000
41	1681	68921
42	1764	74088
43	1849	79507
44	1936	85184
45	2025	91125
46	2116	97336
47	2209	103823
48	2304	110592
49	2401	117649
50	2500	125000
51	2601	132651
52	2704	140608
53	2809	148877
54	2916	157464
55	3025	166375
56	3136	175616
57	3249	185193
58	3364	195112
59	3481	205379
60	3600	216000
61	3721	226981
62	3844	238328
63	3969	250047
64	4096	262144
65	4225	274625
66	4356	287496

R	Q	C
67	4489	300763
68	4624	314432
69	4761	328509
70	4900	343000
71	5041	357911
72	5184	373248
73	5329	389017
74	5476	405224
75	5625	421875
76	5776	438976
77	5929	456533
78	6084	474552
79	6241	493039
80	6400	512000
81	6561	531441
82	6724	551368
83	6889	571787
84	7056	592704
85	7225	614125
86	7396	636056
87	7569	658503
88	7744	681472
89	7921	704969
90	8100	729000
91	8281	753571
92	8464	778688
93	8649	804357
94	8836	830584
95	9025	857375
96	9216	884736
97	9409	912673
98	9604	941192
99	9801	970299
100	10000	1000000

R	Q	C
101	10201	1030301
102	10404	1061208
103	10609	1092727
104	10816	1124864
105	11025	1157625
106	11236	1191016
107	11449	1225043
108	11664	1259712
109	11881	1295029
110	12100	1331000
111	12321	1367631
112	12544	1404928
113	12769	1442897
114	12996	1481544
115	13225	1520875
116	13456	1560896
117	13689	1601613
118	13924	1643032
119	14161	1685159
120	14400	1728000
121	14641	1771561
122	14884	1815848
123	15129	1860867
124	15376	1906624
125	15625	1953125
126	15876	2000376
127	16129	2048383
128	16384	2097152
129	16641	2146689
130	16900	2197000
131	17161	2248091
132	17424	2299968
133	17689	2352637
134	17956	2406104

R	Q	C
135	18225	2460375
136	18496	2515456
137	18769	2571353
138	19044	2628072
139	19321	2685619
140	19600	2744000
141	19881	2803221
142	20164	2863288
143	20449	2924207
144	20736	2985984
145	21025	3048625
146	21316	3112136
147	21609	3176523
148	21904	3241792
149	22201	3307949
150	22500	3375000
151	22801	3442951
152	23104	3511808
153	23409	3581577
154	23716	3652264
155	24025	3723875
156	24336	3796416
157	24649	3869893
158	24964	3944312
159	25281	4019679
160	25600	4096000
161	25921	4173281
162	26244	4251528
163	26569	4330747
164	26896	4410944
165	27225	4492125
166	27556	4574296
167	27889	4657463
168	28224	4741632
169	28561	4826809
170	28900	4913000
171	29241	5000211
172	29584	5088448
173	29929	5177717
174	30276	5268024
175	30625	5359375
176	30976	5451776
177	31329	5545233
178	31684	5639752
179	32041	5735339
180	32400	5832000
181	32761	5929741
182	33124	6028568
183	33489	6128487
184	33856	6229504
185	34225	6331625
186	34596	6434856
187	34969	6539203
188	35344	6644672
189	35721	6751269
190	36100	6859000
191	36481	6967871
192	36864	7077888
193	37249	7189057
194	37636	7301384
195	38025	7414875
196	38416	7529536
197	38809	7645373
198	39204	7762392
199	39601	7880599
200	40000	8000000

R	Q	C	R	Q	C
201	40401	8120601	231	53361	12326391
202	40804	8242408	232	53824	12487168
203	41209	8365427	233	54289	12649337
204	41616	8489664	234	54756	12812904
205	42025	8615125	235	55225	12977875
206	42436	8741816	236	55696	13144256
207	42849	8869743	237	56169	13312053
208	43264	8998912	238	56644	13481272
209	43681	9129329	239	57121	13651919
210	44100	9261000	240	57600	13824000
211	44521	9393931	241	58081	13997521
212	44944	9528128	242	58564	14172488
213	45369	9663597	243	59049	14348907
214	45796	9800344	244	59536	14526784
215	46225	9938375	245	60025	14706125
216	46656	10077696	246	60516	14886936
217	47089	10218313	247	61009	15069223
218	47524	10360232	248	61504	15252992
219	47961	10503459	249	62001	15438249
220	48400	10648000	250	62500	15655000
221	48841	10793861	251	63001	15813251
222	49284	10941048	252	63504	16003008
223	49729	11089567	253	64009	16194277
224	50176	11239424	254	64516	16387064
225	50625	11390625	255	65025	16581375
226	51076	11543176	256	65536	16777216
227	51529	11697083	257	66049	16974593
228	51984	11852352	258	66564	17173512
229	52441	12008989	259	67081	17373979
230	52900	12167000	260	67600	17576000

Usu rara Potestatum est tractatio supra Cubinas; tabulâ ergò aliâ breviore notantur.

Syllabus Potestatum QQ. SS. QC.

R	QQ	SS	QC
1	1	1	1
2	16	32	64
3	81	243	729
4	256	1024	4096
5	625	3135	15625
6	1296	7776	46656
7	2401	16807	117649
8	4096	32768	262144
9	6561	59049	531441
10	10000	100000	1000000
11	14641	161051	1771561
12	20736	248832	2985984
13	28561	371293	4826809
14	38416	537824	7529536
15	50625	759375	11390625
16	65536	1048576	16777216
17	83521	1419857	24137569
18	104976	1889568	34012224
19	130321	2476099	47045881
20	160000	3200000	64000000
21	194481	4084101	85766121
22	234256	5153632	113379904
23	279841	6436343	148035889
24	331776	7962624	191102976
25	390625	9765625	244140625
26	456976	11881376	308915776
27	531441	14348907	387420489
28	614656	17210368	481890394
29	707281	20511149	594823321
30	810000	24300000	729000000

R	QQ	SS	QC
31	923521	28629151	887503681
32	1048576	33554432	1073741824
33	1185921	39135393	1291467969
34	1336336	45435424	1544804416
35	1590625	52521875	1838265625
36	1679616	60466176	2176782336
37	1874161	69343957	2565726409
38	2085136	79235168	3010936384
39	2313441	90224199	3518743761
40	2560000	102400000	4096000000
41	2825761	115856201	4750104241
42	3111696	130691232	5489031744
43	3418801	147008443	6321363049
44	3748096	164916224	7256313856
45	4100625	185428125	8303765625
46	4477456	205962976	9474196896
47	4879681	229345007	10779215329
48	5308416	254903968	12230590464
49	5764801	282475249	13841287201
50	6250000	312500000	15625000000
51	6765201	345025251	17596287801
52	7311616	380204032	19770609664
53	7890481	418195493	22164361129
54	8503056	459165024	24794911296
55	9150625	503284375	27680640625
56	9834496	550731776	30840979456
57	10556001	601692057	34296447249
58	11316496	656356768	38068692544
59	12117361	714924299	42180533641
60	12960000	777600000	46656000000

R	QQ	SS	QC
61	13845841	844596301	51520374361
62	14776336	916132832	56800235584
63	15752961	992436543	62523502209
64	16777216	1073741824	68719476736
65	17850625	1160290625	75418890625
66	18974736	1252332576	82653950016
67	20151121	1350125107	90458382169
68	21381376	1453933568	98867482624
69	22667121	1564031349	107918163081
70	24010000	1680700000	117649000000
71	25411681	1804229351	128100283921
72	26873856	1934917632	139314069504
73	28398241	2073071593	151334226289
74	29986576	2219006624	164206490176
75	31640625	2373046875	177978515625
76	33362176	2535525376	192699928576
77	35153041	2706784157	208422386089
78	37015056	2887174368	225199600464
79	38950081	3077056399	243087455521
80	40960000	3276800000	262144000000
81	43046721	3486784401	282429536481
82	45212176	3707398432	304006671424
83	47458321	3939040643	326940373369
84	49787136	4182119424	351298031616
85	52200625	4437053125	377149513625
86	54700816	4704270176	404567235136
87	57289761	4984209207	433626201609
88	59969536	5277319168	464404086784
89	62742241	5584059449	496981290961
90	65610000	5904900000	531441000000

R	QQ	SS	QC
91	68574961	6240321451	567869252041
92	71639296	6590815232	606355001344
93	74805201	6956883693	646990183449
94	78074896	7339040224	689869781056
95	81450625	7737809375	735091890625
96	84934656	8153726976	782757789696
97	88529281	8587340257	832972004929
98	92236816	9039207968	885841400864
99	96059601	9509900499	941480149401
100	100000000	10000000000	1000000000000
101	104060401	10510100501	1061520150601
102	108243216	11040808032	1126162419264
103	112550881	11592740743	1194052296529
104	116985856	12166529024	1265319018496
105	121550625	12762815625	1340095640625
106	126247696	13382255776	1418519112256
107	131079601	14025517307	1500730351849
108	136048896	14693280768	1586874322944
109	141158161	15386239549	1677100110841
110	146410000	16105100000	1771561000000
111	151807041	16850581551	1870414552161
112	157351936	17623416832	1973822685184
113	163047361	18424351793	2081951752609
114	168896016	19254145824	2194972623936
115	174900625	20113571875	2313060765625
116	181063936	21003416576	2436396322816
117	187388721	21924480357	2565164201769
118	193877776	22877577568	2699554153024
119	200533921	23863536599	2839760855281
120	207360000	24883200000	2985984000000